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(FILE 'CAPLUS' ENTERED AT 09:28:55 ON 17 APR 2006)

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      DEL HIS Y
L1      18950 SEA ABB=ON PLU=ON ANTIBODIES/OBI AND IMMUNOGLOBULINS/CT
L2      132838 SEA ABB=ON PLU=ON ANTIBODIES/CT
L3      66872 SEA ABB=ON PLU=ON IMMUNOGLOBULINS/CT
L4      185751 SEA ABB=ON PLU=ON (L1 OR L2 OR L3)
      E ANTIBODIES AND IMMUNOGLOBULINS/CT
      E E3
L5      77415 SEA ABB=ON PLU=ON "ANTIBODIES AND IMMUNOGLOBULINS"/CT
L6      263165 SEA ABB=ON PLU=ON L5 OR L2 OR L3
L7      87507 SEA ABB=ON PLU=ON L6 (L) (PREP OR BPN OR SPN OR DGN OR THU
      OR USES )/RL
L8      8253 SEA ABB=ON PLU=ON L7 (L) (RECOMBIN?/OBI OR CHIMER?/OBI OR
      HUMANI?/OBI)
L9      4850 SEA ABB=ON PLU=ON CDR#/BI
L10     373 SEA ABB=ON PLU=ON L8 AND L9
L11     46 SEA ABB=ON PLU=ON L8 (L) L9
L12     2649 SEA ABB=ON PLU=ON (CDR1 OR CDR2 OR CDR3)/BI
L13     94 SEA ABB=ON PLU=ON L12 AND L8
L14     130 SEA ABB=ON PLU=ON L11 OR L13
L15     14623 SEA ABB=ON PLU=ON HEAVY CHAIN/OBI
L16     25301 SEA ABB=ON PLU=ON LIGHT CHAIN/OBI
L17     252321 SEA ABB=ON PLU=ON PROTEIN SEQUENCE#/OBI
L18     1100 SEA ABB=ON PLU=ON (ANTIGEN BIND? SITE)/BI
L19     9 SEA ABB=ON PLU=ON L18 AND L14
      D SCAN TI
L20     93965 SEA ABB=ON PLU=ON BIOMARKER#/OBI OR MARKER#/OBI
L21     8 SEA ABB=ON PLU=ON L20 AND L14
L22     19544 SEA ABB=ON PLU=ON CANCER/OBI (L) DIAGNOS?/OBI
L23     17 SEA ABB=ON PLU=ON L22 AND L14
L24     4 SEA ABB=ON PLU=ON L23 AND L20
L25     13 SEA ABB=ON PLU=ON L19 OR L24
L26     92 SEA ABB=ON PLU=ON L17 AND L14
L27     92 SEA ABB=ON PLU=ON L26 AND ((L16 OR L17))
L28     7 SEA ABB=ON PLU=ON L18 AND L27
L29     13 SEA ABB=ON PLU=ON L25 OR L28
L30     87360 SEA ABB=ON PLU=ON VECTOR?/OBI
L31     36 SEA ABB=ON PLU=ON L14 AND L30
L32     25 SEA ABB=ON PLU=ON L31 AND ((L15 OR L16) OR L22 OR L20)
L33     22 SEA ABB=ON PLU=ON L32 NOT L29
L34     656043 SEA ABB=ON PLU=ON DNA/OBI OR CDNA/OBI OR NUCLEIC ACID/OBI
L35     19 SEA ABB=ON PLU=ON L33 AND L34
L36     32 SEA ABB=ON PLU=ON L35 OR L29
L37     77 SEA ABB=ON PLU=ON BOLHUIS R?/AU
L38     9 SEA ABB=ON PLU=ON WOHL T?/AU
L39     26 SEA ABB=ON PLU=ON BOETTGER V?/AU
L40     110 SEA ABB=ON PLU=ON (L37 OR L38 OR L39)
L41     1 SEA ABB=ON PLU=ON L40 AND L10
L42     1 SEA ABB=ON PLU=ON L41 AND L9
L43     1 SEA ABB=ON PLU=ON L41 OR L42
L44     16 SEA ABB=ON PLU=ON L7 AND L40
L45     2 SEA ABB=ON PLU=ON L44 AND (L20 OR L22)
L46     2 SEA ABB=ON PLU=ON L43 OR L45
      D SCAN
L47     287 SEA ABB=ON PLU=ON L8 AND L20 AND L22
L48     260 SEA ABB=ON PLU=ON L47 AND L34
L49     3726 SEA ABB=ON PLU=ON L15 AND L16
L50     37 SEA ABB=ON PLU=ON L48 AND L49

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L51 37 SEA ABB=ON PLU=ON L50 AND L17  
 L52 0 SEA ABB=ON PLU=ON L51 AND L18  
 L53 0 SEA ABB=ON PLU=ON L52 AND L9  
 L54 5 SEA ABB=ON PLU=ON L51 AND L9  
 L55 35 SEA ABB=ON PLU=ON L54 OR L36  
 L57 1 SEA ABB=ON PLU=ON L46 NOT L55

FILE 'BIOSIS' ENTERED AT 10:23:42 ON 17 APR 2006

L58 354629 SEA ABB=ON PLU=ON ANTIBOD?/TI, IT  
 L59 148790 SEA ABB=ON PLU=ON IMMUNOGLOBULIN?/TI, IT  
 L60 2488 SEA ABB=ON PLU=ON CDR1 OR CDR2 OR CDR3  
 L61 460412 SEA ABB=ON PLU=ON L58 OR L59  
 L62 996 SEA ABB=ON PLU=ON L60 AND L61  
 L63 728 SEA ABB=ON PLU=ON L62 AND (CHIMER? OR RECOMBIN? OR HUMAN?)  
 L64 318259 SEA ABB=ON PLU=ON MARKER? OR BIOMARKER?  
 L65 34 SEA ABB=ON PLU=ON L63 AND L64  
 L66 1 SEA ABB=ON PLU=ON CANCER AND L65  
 D SCAN  
 L67 22617 SEA ABB=ON PLU=ON LIGHT CHAIN  
 L68 25751 SEA ABB=ON PLU=ON HEAVY CHAIN  
 L69 18 SEA ABB=ON PLU=ON L65 AND ((L67 OR L68))  
 L70 11770 SEA ABB=ON PLU=ON PROTEIN SEQUENCE  
 L71 1201460 SEA ABB=ON PLU=ON (DNA OR CDNA OR NUCLEIC ACID)  
 L72 0 SEA ABB=ON PLU=ON L69 AND (L70 AND L71)  
 L73 8 SEA ABB=ON PLU=ON L69 AND (L70 OR L71)  
 L74 848 SEA ABB=ON PLU=ON ANTIGEN BIND? SITE  
 L75 1 SEA ABB=ON PLU=ON L65 AND L74  
 L76 47654 SEA ABB=ON PLU=ON HOST (4A) CELL OR ANIMAL (4A) HOST  
 L77 1 SEA ABB=ON PLU=ON L65 AND L76  
 D SCAN  
 L78 10 SEA ABB=ON PLU=ON L66 OR L73 OR L75 OR L77  
 E BOLHUIS R?/AU  
 L79 37 SEA ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR "BOLHUIS REINDER  
 I H"/AU OR "BOLHUIS REINDER L"/AU OR "BOLHUIS REINDER L H"/AU  
 OR "BOLHUIS REINDER L H"/AU OR "BOLHUIS REINDER L H"/AU)  
 E WOEHL T?/AU  
 L80 9 SEA ABB=ON PLU=ON "WOEHL THORSTEN"/AU  
 E BOETTGER V?/AU  
 L81 7 SEA ABB=ON PLU=ON "BOETTGER VOLKER"/AU  
 L82 53 SEA ABB=ON PLU=ON (L79 OR L80 OR L81)  
 L83 21 SEA ABB=ON PLU=ON L82 AND L61  
 L84 0 SEA ABB=ON PLU=ON L83 AND L63  
 L85 18 SEA ABB=ON PLU=ON L83 AND (CHIMER? OR HUMAN? OR RECOMBIN? OR  
 VECTOR?)  
 L86 0 SEA ABB=ON PLU=ON L85 AND L64  
 L87 9 SEA ABB=ON PLU=ON L85 AND CANCER  
 L88 1 SEA ABB=ON PLU=ON L85 AND ((L67 OR L68))  
 L89 0 SEA ABB=ON PLU=ON HOST AND L85  
 L90 10 SEA ABB=ON PLU=ON (L87 OR L88)  
 L91 10 SEA ABB=ON PLU=ON L90 NOT L78

FILE 'MEDLINE' ENTERED AT 10:35:25 ON 17 APR 2006

E BOLHUIS R?/AU  
 L92 10 SEA ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR "BOLHUIS REINDER  
 L"/AU OR "BOLHUIS REINDER L H"/AU OR "BOLHUIS REINDER L H"/AU)

FILE 'CAPLUS, BIOSIS' ENTERED AT 10:36:09 ON 17 APR 2006

L93 45 DUP REM L55 L78 (0 DUPLICATES REMOVED)  
 ANSWERS '1-35' FROM FILE CAPLUS  
 ANSWERS '36-45' FROM FILE BIOSIS

Tungaturthi 10/635,908

L94

11 DUP REM L57 L91 (0 DUPLICATES REMOVED)  
ANSWER '1' FROM FILE CAPLUS  
ANSWERS '2-11' FROM FILE BIOSIS

=> fil caplus biosis

FILE 'CAPLUS' ENTERED AT 10:36:52 ON 17 APR 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE 'BIOSIS' ENTERED AT 10:36:52 ON 17 APR 2006

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L2	132838	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	ANTIBODIES/CT
L3	66872	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	IMMUNOGLOBULINS/CT
L5	77415	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"ANTIBODIES AND IMMUNOGLOBULINS "/CT
L6	263165	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L5 OR L2 OR L3
L7	87507	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L6 (L) (PREP OR BPN OR SPN OR DGN OR THU OR USES )/RL
L8	8253	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L7 (L) (RECOMBIN?/OBI OR CHIMER?/OBI OR HUMANI?/OBI)
L9	4850	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	CDR#/BI
L11	46	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 (L) L9
L12	2649	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	(CDR1 OR CDR2 OR CDR3)/BI
L13	94	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L12 AND L8
L14	130	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L11 OR L13
L15	14623	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	HEAVY CHAIN/OBI
L16	25301	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	LIGHT CHAIN/OBI
L17	252321	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	PROTEIN SEQUENCE#/OBI
L18	1100	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	(ANTIGEN BIND? SITE)/BI
L19	9	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L18 AND L14
L20	93965	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	BIOMARKER#/OBI OR MARKER#/OBI
L22	19544	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	CANCER/OBI (L) DIAGNOS?/OBI
L23	17	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L22 AND L14
L24	4	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L23 AND L20
L25	13	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L19 OR L24
L26	92	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L17 AND L14
L27	92	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L26 AND ((L16 OR L17))
L28	7	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L18 AND L27
L29	13	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L25 OR L28
L30	87360	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	VECTOR?/OBI
L31	36	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L14 AND L30
L32	25	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L31 AND ((L15 OR L16) OR L22 OR L20)
L33	22	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L32 NOT L29
L34	656043	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	DNA/OBI OR CDNA/OBI OR NUCLEIC ACID/OBI
L35	19	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L33 AND L34
L36	32	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L35 OR L29
L47	287	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L8 AND L20 AND L22
L48	260	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L47 AND L34
L49	3726	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L15 AND L16
L50	37	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L48 AND L49
L51	37	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L50 AND L17
L54	5	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L51 AND L9
L55	35	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L54 OR L36
L58	354629	SEA	FILE=BIOSIS	ABB=ON	PLU=ON	ANTIBOD?/TI, IT
L59	148790	SEA	FILE=BIOSIS	ABB=ON	PLU=ON	IMMUNOGLOBULIN?/TI, IT
L60	2488	SEA	FILE=BIOSIS	ABB=ON	PLU=ON	CDR1 OR CDR2 OR CDR3
L61	460412	SEA	FILE=BIOSIS	ABB=ON	PLU=ON	L58 OR L59
L62	996	SEA	FILE=BIOSIS	ABB=ON	PLU=ON	L60 AND L61

L63 728 SEA FILE=BIOSIS ABB=ON PLU=ON L62 AND (CHIMER? OR RECOMBIN?  
OR HUMAN?)

L64 318259 SEA FILE=BIOSIS ABB=ON PLU=ON MARKER? OR BIOMARKER?

L65 34 SEA FILE=BIOSIS ABB=ON PLU=ON L63 AND L64

L66 1 SEA FILE=BIOSIS ABB=ON PLU=ON CANCER AND L65

L67 22617 SEA FILE=BIOSIS ABB=ON PLU=ON LIGHT CHAIN

L68 25751 SEA FILE=BIOSIS ABB=ON PLU=ON HEAVY CHAIN

L69 18 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND ((L67 OR L68))

L70 11770 SEA FILE=BIOSIS ABB=ON PLU=ON PROTEIN SEQUENCE

L71 1201460 SEA FILE=BIOSIS ABB=ON PLU=ON (DNA OR CDNA OR NUCLEIC ACID)

L73 8 SEA FILE=BIOSIS ABB=ON PLU=ON L69 AND (L70 OR L71)

L74 848 SEA FILE=BIOSIS ABB=ON PLU=ON ANTIGEN BIND? SITE

L75 1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L74

L76 47654 SEA FILE=BIOSIS ABB=ON PLU=ON HOST (4A) CELL OR ANIMAL (4A)  
HOST

L77 1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L76

L78 10 SEA FILE=BIOSIS ABB=ON PLU=ON L66 OR L73 OR L75 OR L77

L93 45 DUP REM L55 L78 (0 DUPLICATES REMOVED)

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*invariant search*

L2 132838 SEA FILE=CAPLUS ABB=ON PLU=ON ANTIBODIES/CT

L3 66872 SEA FILE=CAPLUS ABB=ON PLU=ON IMMUNOGLOBULINS/CT

L5 77415 SEA FILE=CAPLUS ABB=ON PLU=ON "ANTIBODIES AND IMMUNOGLOBULINS  
"/CT

L6 263165 SEA FILE=CAPLUS ABB=ON PLU=ON L5 OR L2 OR L3

L7 87507 SEA FILE=CAPLUS ABB=ON PLU=ON L6 (L) (PREP OR BPN OR SPN OR  
DGN OR THU OR USES )/RL

L8 8253 SEA FILE=CAPLUS ABB=ON PLU=ON L7 (L) (RECOMBIN?/OBI OR  
CHIMER?/OBI OR HUMANI?/OBI)

L9 4850 SEA FILE=CAPLUS ABB=ON PLU=ON CDR#/BI

L10 373 SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND L9

L11 46 SEA FILE=CAPLUS ABB=ON PLU=ON L8 (L) L9

L12 2649 SEA FILE=CAPLUS ABB=ON PLU=ON (CDR1 OR CDR2 OR CDR3)/BI

L13 94 SEA FILE=CAPLUS ABB=ON PLU=ON L12 AND L8

L14 130 SEA FILE=CAPLUS ABB=ON PLU=ON L11 OR L13

L15 14623 SEA FILE=CAPLUS ABB=ON PLU=ON HEAVY CHAIN/OBI

L16 25301 SEA FILE=CAPLUS ABB=ON PLU=ON LIGHT CHAIN/OBI

L17 252321 SEA FILE=CAPLUS ABB=ON PLU=ON PROTEIN SEQUENCE#/OBI

L18 1100 SEA FILE=CAPLUS ABB=ON PLU=ON (ANTIGEN BIND? SITE)/BI

L19 9 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND L14

L20 93965 SEA FILE=CAPLUS ABB=ON PLU=ON BIOMARKER#/OBI OR MARKER#/OBI

L22 19544 SEA FILE=CAPLUS ABB=ON PLU=ON CANCER/OBI (L) DIAGNOS?/OBI

L23 17 SEA FILE=CAPLUS ABB=ON PLU=ON L22 AND L14

L24 4 SEA FILE=CAPLUS ABB=ON PLU=ON L23 AND L20

L25 13 SEA FILE=CAPLUS ABB=ON PLU=ON L19 OR L24

L26 92 SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L14

L27 92 SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND ((L16 OR L17))

L28 7 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND L27

L29 13 SEA FILE=CAPLUS ABB=ON PLU=ON L25 OR L28

L30 87360 SEA FILE=CAPLUS ABB=ON PLU=ON VECTOR?/OBI

L31 36 SEA FILE=CAPLUS ABB=ON PLU=ON L14 AND L30

L32 25 SEA FILE=CAPLUS ABB=ON PLU=ON L31 AND ((L15 OR L16) OR L22  
OR L20)

L33 22 SEA FILE=CAPLUS ABB=ON PLU=ON L32 NOT L29

L34 656043 SEA FILE=CAPLUS ABB=ON PLU=ON DNA/OBI OR CDNA/OBI OR NUCLEIC  
ACID/OBI

L35 19 SEA FILE=CAPLUS ABB=ON PLU=ON L33 AND L34

L36 32 SEA FILE=CAPLUS ABB=ON PLU=ON L35 OR L29

L37 77 SEA FILE=CAPLUS ABB=ON PLU=ON BOLHUIS R?/AU

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L38      9 SEA FILE=CAPLUS ABB=ON PLU=ON WOEHL T?/AU
L39     26 SEA FILE=CAPLUS ABB=ON PLU=ON BOETTGER V?/AU
L40    110 SEA FILE=CAPLUS ABB=ON PLU=ON (L37 OR L38 OR L39)
L41      1 SEA FILE=CAPLUS ABB=ON PLU=ON L40 AND L10
L42      1 SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L9
L43      1 SEA FILE=CAPLUS ABB=ON PLU=ON L41 OR L42
L44     16 SEA FILE=CAPLUS ABB=ON PLU=ON L7 AND L40
L45      2 SEA FILE=CAPLUS ABB=ON PLU=ON L44 AND (L20 OR L22)
L46      2 SEA FILE=CAPLUS ABB=ON PLU=ON L43 OR L45
L47    287 SEA FILE=CAPLUS ABB=ON PLU=ON L8 AND L20 AND L22
L48    260 SEA FILE=CAPLUS ABB=ON PLU=ON L47 AND L34
L49   3726 SEA FILE=CAPLUS ABB=ON PLU=ON L15 AND L16
L50      37 SEA FILE=CAPLUS ABB=ON PLU=ON L48 AND L49
L51      37 SEA FILE=CAPLUS ABB=ON PLU=ON L50 AND L17
L54       5 SEA FILE=CAPLUS ABB=ON PLU=ON L51 AND L9
L55     35 SEA FILE=CAPLUS ABB=ON PLU=ON L54 OR L36
L57      1 SEA FILE=CAPLUS ABB=ON PLU=ON L46 NOT L55
L58  354629 SEA FILE=BIOSIS ABB=ON PLU=ON ANTIBOD?/TI,IT
L59 148790 SEA FILE=BIOSIS ABB=ON PLU=ON IMMUNOGLOBULIN?/TI,IT
L60    2488 SEA FILE=BIOSIS ABB=ON PLU=ON CDR1 OR CDR2 OR CDR3
L61  460412 SEA FILE=BIOSIS ABB=ON PLU=ON L58 OR L59
L62     996 SEA FILE=BIOSIS ABB=ON PLU=ON L60 AND L61
L63     728 SEA FILE=BIOSIS ABB=ON PLU=ON L62 AND (CHIMER? OR RECOMBIN?
OR HUMAN?)
L64  318259 SEA FILE=BIOSIS ABB=ON PLU=ON MARKER? OR BIOMARKER?
L65      34 SEA FILE=BIOSIS ABB=ON PLU=ON L63 AND L64
L66       1 SEA FILE=BIOSIS ABB=ON PLU=ON CANCER AND L65
L67   22617 SEA FILE=BIOSIS ABB=ON PLU=ON LIGHT CHAIN
L68   25751 SEA FILE=BIOSIS ABB=ON PLU=ON HEAVY CHAIN
L69      18 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND ((L67 OR L68))
L70   11770 SEA FILE=BIOSIS ABB=ON PLU=ON PROTEIN SEQUENCE
L71 1201460 SEA FILE=BIOSIS ABB=ON PLU=ON (DNA OR CDNA OR NUCLEIC ACID)
L73       8 SEA FILE=BIOSIS ABB=ON PLU=ON L69 AND (L70 OR L71)
L74     848 SEA FILE=BIOSIS ABB=ON PLU=ON ANTIGEN BIND? SITE
L75       1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L74
L76   47654 SEA FILE=BIOSIS ABB=ON PLU=ON HOST (4A) CELL OR ANIMAL (4A)
HOST
L77       1 SEA FILE=BIOSIS ABB=ON PLU=ON L65 AND L76
L78      10 SEA FILE=BIOSIS ABB=ON PLU=ON L66 OR L73 OR L75 OR L77
L79     37 SEA FILE=BIOSIS ABB=ON PLU=ON ("BOLHUIS REINDER"/AU OR
"BOLHUIS REINDER I H"/AU OR "BOLHUIS REINDER L"/AU OR "BOLHUIS
REINDER L H"/AU OR "BOLHUIS REINER L H"/AU OR "BOLHUIS REINIER
L H"/AU)
L80       9 SEA FILE=BIOSIS ABB=ON PLU=ON "WOEHL THORSTEN"/AU
L81       7 SEA FILE=BIOSIS ABB=ON PLU=ON "BOETTGER VOLKER"/AU
L82     53 SEA FILE=BIOSIS ABB=ON PLU=ON (L79 OR L80 OR L81)
L83     21 SEA FILE=BIOSIS ABB=ON PLU=ON L82 AND L61
L85     18 SEA FILE=BIOSIS ABB=ON PLU=ON L83 AND (CHIMER? OR HUMAN? OR
RECOMBIN? OR VECTOR?)
L87       9 SEA FILE=BIOSIS ABB=ON PLU=ON L85 AND CANCER
L88       1 SEA FILE=BIOSIS ABB=ON PLU=ON L85 AND ((L67 OR L68))
L90      10 SEA FILE=BIOSIS ABB=ON PLU=ON (L87 OR L88)
L91      10 SEA FILE=BIOSIS ABB=ON PLU=ON L90 NOT L78
L94     11 DUP REM L57 L91 (0 DUPLICATES REMOVED)

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=> d .ca 1-35 193 ; d ibib ab ct 193 36-45;d ibib 194 1-11

L93 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2006:32288 CAPLUS

DOCUMENT NUMBER: 144:127499  
 TITLE: Human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection  
 INVENTOR(S): Moretta, Alessandro; Della Chiesa, Mariella; Andre, Pascale; Gauthier, Laurent; Romagne, Francois; Wagtmann, Peter Andreas Nicolai Reumert; Svendsen, Ivan; Zahn, Stefan; Svensson, Anders; Thorolfsson, Matthias  
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Innate Pharma; University of Genoa  
 SOURCE: PCT Int. Appl., 153 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006003179	A2	20060112	WO 2005-EP53122	20050701
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
WO 2005003168	A2	20050113	WO 2004-DK470	20040701
WO 2005003168	A3	20050506		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MX, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2005003172	A2	20050113	WO 2004-IB2464	20040701
WO 2005003172	A3	20050310		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: WO 2004-DK470 A 20040701  
 WO 2004-IB2464 A 20040701

DK 2005-25	A 20050106
US 2003-483894P	P 20030702
US 2004-545471P	P 20040219

ED Entered STN: 13 Jan 2006

AB Compns. and methods for regulating an immune response in a subject are described. More particularly, described are human antibodies that regulate the activity of NK cells and allow a potentiation of NK cell cytotoxicity in mammalian subjects, and antibodies having antigen-binding properties similar to those of human monoclonal antibody 1-7F9 or 14F1. Described also are also fragments and derivs. of such antibodies, as well as pharmaceutical compns. comprising the same and their uses, particularly for use in therapy, to increase NK cell activity or cytotoxicity in subjects.

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 63

IT Protein motifs

(CDR1-3 of light and **heavy chains**; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(chimeric; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT Affinity

Angiogenesis inhibitors

Animal cell line

Anti-infective agents

Antitumor agents

Cytolysis

Cytotoxicity

Dissociation constant

Drug delivery systems

Drugs

Epitopes

Genetic **vectors**

Human

Hybridoma

Immunomodulators

Infection

Kidney, neoplasm

Lung, neoplasm

Lymphocyte

Mammalia

Mammary gland, neoplasm

Melanoma

Molecular cloning

Multiple myeloma

Neoplasm

Ovary, neoplasm

Protein sequences

Radiotherapy

T cell (lymphocyte)



(human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT **Nucleic acids**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)

(human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(humanized; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**light chain**; human anti-KIR receptor antibodies for potentiating NK cell cytotoxicity and treating cancer or infection)

L93 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:229643 CAPLUS

DOCUMENT NUMBER: 144:310451

TITLE: Anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening

INVENTOR(S): Gerard, Craig J.; Gerard, Norma P.; Mackay, Charles R.; Ponath, Paul D.; Post, Theodore W.; Qin, Shixin

PATENT ASSIGNEE(S): Children's Medical Center Corp., USA; Millennium Pharmaceuticals, Inc.; Brigham & Women's Hospital

SOURCE: U.S., 85 pp., Cont.-in-part of U.S. Ser. No. 375,199. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7012133	B1	20060314	US 1997-963656	19971103
US 6806061	B1	20041019	US 1995-375199	19950119
WO 9622371	A2	19960725	WO 1996-US608	19960119
WO 9622371	A3	19961017		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE				
US 6537764	B1	20030325	US 1996-720565	19960930
US 2006002926	A1	20060105	US 2005-216610	20050831
PRIORITY APPLN. INFO.:			US 1995-375199	A2 19950119
			WO 1996-US608	W 19960119
			US 1996-720565	A3 19960930
			US 1997-963656	A1 19971103

ED Entered STN: 15 Mar 2006

AB The present invention relates to isolated and/or recombinant nucleic acids which encode a mammalian (e.g., human) receptor protein designated C-C Chemokine Receptor 3 (CKR-3) or Eos L2, and to proteins or polypeptides,

referred to herein as isolated, recombinant mammalian CKR-3 receptors. The invention further relates to recombinant nucleic acid constructs, comprising a nucleic acid which encodes a receptor protein of the present invention or a portion thereof; to host cells comprising such constructs, useful for the production of recombinant CKR-3 receptors or polypeptides; and to antibodies reactive with the receptors, which are useful in research and diagnostic applications. Also provided are methods of use of the nucleic acids, proteins, and host cells to identify ligands, inhibitors (e.g., antagonists) or promoters (agonists) of receptor function. Administration of a compound which inhibits or promotes receptor function to an individual in need of therapy provides a new approach to selective modulation of leukocyte function, which is useful in a variety of inflammatory and autoimmune diseases, or in the treatment of infections. As a major leukocyte chemokine receptor present in leukocytes such as eosinophils and lymphocytes, the receptor provides a key target for drug screening and design.

INCL 530387100; 530388220; 435320100; 435325000

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 9, 63

IT Affinity

Anti-infective agents

Anti-inflammatory agents

Autoimmune disease

DNA sequences

Genetic **vectors**

Human

Hybridoma

Immunoassay

Immunotherapy

Infection

Inflammation

Leukocyte

Molecular cloning

Nucleic acid hybridization

Plasmids

Protein sequences

Retroviral **vectors**

cDNA sequences

(anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT Antisense **nucleic acids**

RL: ARG (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (**Diagnostic use**); THU (**Therapeutic use**); ANST (Analytical study); BIOL (Biological study); USES (**Uses**)

(**chimeric**; anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(**heavy chain**, CDR1-3; anti-human C-C

chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

DGN (Diagnostic use); THU (Therapeutic use); ANST

(Analytical study); BIOL (Biological study); USES (Uses)

(humanized; anti-human C-C chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL

(Biological study); USES (Uses)

(light chain, CDR1-3; anti-human C-C

chemokine receptor 3 protein antibodies and fragments for diagnosis and treatment of inflammation, autoimmune disease and infection as well as drug screening)

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:983976 CAPLUS

DOCUMENT NUMBER: 143:284715

TITLE: Rationally designed or domain-exchanged antibodies comprising biologically active peptide for diagnostic or therapeutic purpose

INVENTOR(S): Bowdish, Katherine S.; Frederickson, Shana; Renshaw, Mark; Maruyama, Toshiaki; Orenica, Cecilia

PATENT ASSIGNEE(S): Alexion Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082004	A2	20050909	WO 2005-US5879	20050222
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2004-547133P P 20040224

ED Entered STN: 09 Sep 2005

AB Domain-exchanged antibodies having CDR regions replaced or fused with biol. active peptides are described. Flanking sequences may optionally be attached at one or both the carboxy-terminal and amino-terminal ends of the peptide in covalent association with adjacent framework regions. Compns. containing such modified domain-exchanged antibodies are useful in therapeutic and diagnostic modalities.

IC ICM A61K

- CC 15-3 (Immunochemistry)  
Section cross-reference(s): 1, 3, 9, 63
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**chimeric**; rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)
- IT Adoptive immunotherapy  
Cell differentiation  
Cell proliferation  
Diabetes mellitus  
Drug design  
Genetic **vectors**  
Hematopoietic precursor cell  
Human  
Human immunodeficiency virus 1  
Immunoassay  
Immunotherapy  
Megakaryocyte  
Peptidomimetics  
Test kits  
cDNA library  
(rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
Fusion proteins (chimeric proteins)  
**Nucleic acids**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)
- IT 864194-16-1DP, Adiponectin (synthetic peptide Acrp30), antibody  
**heavy chain** conjugates 864202-13-1P 864202-14-2P  
864202-16-4P 864202-18-6P 864202-21-1P 864202-22-2P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; rationally designed or domain-exchanged antibodies comprising biol. active peptide replacing CDR for diagnosis and therapy)

L93 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:564636 CAPLUS  
 DOCUMENT NUMBER: 143:95823  
 TITLE: Anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection  
 INVENTOR(S): Deshpande, Shrikant; Huang, Haichun; Srinivasan, Mohan; Cardarelli, Josephine M.; Wang, Changyu; Passmore, David; Rangan, Vangipuram S.; Lane, Thomas E.; Keirstead, Hans S.; Liu, Michael T.  
 PATENT ASSIGNEE(S): Medarex, Inc., USA  
 SOURCE: PCT Int. Appl., 179 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058815	A2	20050630	WO 2004-US41506	20041210
WO 2005058815	A3	20060223		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2005191293	A1	20050901	US 2004-9731	20041210
PRIORITY APPLN. INFO.:			US 2003-529180P	P 20031210

ED Entered STN: 30 Jun 2005

AB The present invention provides isolated monoclonal antibodies, particularly human antibodies, that bind to IP-10 with high affinity, inhibit the binding of IP-10 to its receptor, inhibit IP-10-induced calcium flux and inhibit IP-10-induced cell migration. Nucleic acid mols. encoding the antibodies of the invention, expression vectors, host cells and methods for expressing the antibodies of the invention are also provided. Immunoconjugates, bispecific mols. and pharmaceutical compns. comprising the antibodies of the invention are also provided. The invention also provides methods for inhibiting IP-10 activity using the antibodies of the invention, including methods for treating various inflammatory and autoimmune diseases.

IC ICM C07D

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 63

IT Protein motifs

(CDR1-3 of light and heavy chain;

anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT Alzheimer's disease

Angiogenesis

Asthma

Atherosclerosis

Autoimmune disease

Chemotaxis  
DNA sequences  
Dermatitis  
Drug delivery systems  
Genetic **vectors**  
Graves' disease  
Hepatitis C virus  
Human  
Human herpesvirus 1  
Human immunodeficiency virus  
Hybridoma  
Immunotherapy  
Inflammation  
Macaca mulatta  
Molecular cloning  
Multiple sclerosis  
Parkinson's disease  
Protein sequences  
Psoriasis  
Rheumatoid arthritis  
SARS coronavirus  
Sjogren syndrome  
Transplant rejection  
(anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT **Nucleic acids**  
Radionuclides, biological studies  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**chimeric**; anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**humanized**; anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease, neurodegenerative disease, bacterial infection and viral infection)

IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; anti-IP-10 antibodies and immunoconjugates for treating inflammation, autoimmune disease,

neurodegenerative disease, bacterial infection and viral infection)

L93 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:260102 CAPLUS

DOCUMENT NUMBER: 142:334929

TITLE: Chimeric or humanized monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy

INVENTOR(S): Kolbinger, Frank; Carballido Herrera, Jose M.; Aszodi, Andras; Saldanha, Jose W.; Hall, Bruce M.; Gregori, Silvia; Roncarolo, Maria Grazia; Loux, Veronique; Aversa, Gregorio; Jeschke, Margit

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 134 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005026210	A2	20050324	WO 2004-EP10471	20040917
WO 2005026210	A3	20050714		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

US 2005069538 A1 20050331 US 2003-666332 20030918

PRIORITY APPLN. INFO.: US 2003-666332 A 20030918

GB 2004-14309 A 20040625

ED Entered STN: 25 Mar 2005

AB A mol. comprising at least one **antigen binding****site**, comprising in sequence the hypervariable regions **CDR1**, **CDR2** and **CDR3**, said **CDR1**

having the amino acid sequence Asn-Tyr-Ile-Ile-His (NYIIH), said

**CDR2** having the amino acid sequence Tyr-Phe-Asn-Pro-Tyr-Asn-His-

Gly-Thr-Lys-Tyr-Asn-Glu-Lys-Phe -Lys-Gly (YFNPYNHGTYNEKFKG) and said

**CDR3** having the amino acid sequence Ser-Gly-Pro-Tyr-Ala-Trp-Phe-Asp-Thr (SGPYAWFDT); e.g. further comprising in sequence the hypervariable regions **CDR1'**, **CDR2'** and **CDR3'**, **CDR1**

' having the amino acid sequence Arg-Ala-Ser-Gln-Asn-Ile-Gly-Thr-Ser-Ile-

Gln (RASQNIQTISIQ), **CDR2'** having the amino acid sequenceSer-Ser-Ser-Glu-Ser-Ile-Ser (SSSESIS) and **CDR3'** having the amino

acid sequence Gln-Gln-Ser-Asn-Thr-Trp-Pro-Phe-Thr (QQSNTWPFT), e.g. a

chimeric or humanized antibody, useful as a pharmaceutical. The

antibodies and derivs. are specific antigen CD45 e.g. CD45RO and CD45RB.

The CD45 isoform-specific chimeric or humanized monoclonal antibodies and

derivs. are useful for treating autoimmune diseases, transplant rejection,

psoriasis, dermatitis, inflammatory bowel disease, allergy and graft vs.

host disease.

IC ICM C07K016-28

ICS C12N015-13; C12N015-62; C12N015-79; C12N005-10; A61K039-395;

A61P037-00

- CC 15-3 (Immunochemistry)  
Section cross-reference(s): 3, 63
- ST human CD45 CD45RO CD45RB humanized chimeric antibody autoimmune disease;  
inflammation allergy psoriasis monoclonal antibody humanized heavy  
light chain
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(IgG; chimeric or humanized monoclonal anti-CD45  
isoform antibodies for treating autoimmune disease, transplant  
rejection, inflammation and allergy)
- IT Allergy  
Autoimmune disease  
CD4-positive T cell  
DNA sequences  
Dermatitis  
Dissociation constant  
Drug delivery systems  
Drugs  
Epitopes  
Genetic vectors  
Human  
Immunosuppression  
Inflammation  
Molecular cloning  
Protein sequences  
Psoriasis  
Transplant rejection  
(chimeric or humanized monoclonal anti-CD45 isoform antibodies for  
treating autoimmune disease, transplant rejection, inflammation and  
allergy)
- IT **Antibodies and Immunoglobulins**  
Polynucleotides  
RL: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(chimeric or humanized monoclonal anti-CD45 isoform  
antibodies for treating autoimmune disease, transplant rejection,  
inflammation and allergy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(chimeric; chimeric or humanized  
monoclonal anti-CD45 isoform antibodies for treating autoimmune  
disease, transplant rejection, inflammation and allergy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(fragments; chimeric or humanized monoclonal  
anti-CD45 isoform antibodies for treating autoimmune disease,  
transplant rejection, inflammation and allergy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(heavy chain; chimeric or humanized monoclonal



anti-CD45 isoform antibodies for treating autoimmune disease,  
transplant rejection, inflammation and allergy)

**IT Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(humanized; chimeric or humanized

monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

**IT Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(light chain; chimeric or

humanized monoclonal anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

**IT Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(monoclonal; chimeric or humanized monoclonal

anti-CD45 isoform antibodies for treating autoimmune disease, transplant rejection, inflammation and allergy)

L93 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:216843 CAPLUS

DOCUMENT NUMBER: 142:296682

TITLE: Minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy

INVENTOR(S): Kashmiri, Syed V. S.; Schlom, Jeffrey; Padlan, Eduardo A.

PATENT ASSIGNEE(S): The Government of the United States of America, as Represented by the Secretary of the Department of Health and Human Services, USA

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021594	A2	20050310	WO 2004-US28004	20040827
WO 2005021594	A3	20050616		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2003-498903P P 20030829

ED Entered STN: 11 Mar 2005

AB Humanized CC49 anti-TAG-72 monoclonal antibodies are disclosed herein.

The antibodies include a light chain Complementarity Determining Region L-CDR1, a L-CDR2, and a L-CDR3; and a heavy chain Complementarity Determining Region H-CDR1, a H-CDR2, and a H-CDR3 from humanized antibody HuCC49V10. The L-CDR1, L-CDR2, L-CDR3 are within a HuCC49V10 light chain framework region that includes the corresponding amino acid from LEN at position 5, 19, 21, and 106 in the light chain. The H-CDR1, H-CDR2, and H-CDR3 are within a heavy chain HuCC49V10 framework comprising a human 21/28' CL residue at positions 20, 38, 48, 66, 67, 69, and 80 in the heavy chain. These humanized CC49 antibodies retain binding affinity for TAG-72 and have reduced immunogenicity, as compared to a parental HuCC49V10 antibody. Methods are disclosed herein for using these antibodies in the treatment or diagnosis of a tumor, such as a carcinoma, expressing TAG-72.

- IC ICM C07K016-46  
ICS C07K016-30; A61K039-395; A61P035-00; G01N033-574; C12N015-10
- CC 15-3 (Immunochemistry)  
Section cross-reference(s): 3, 9, 63
- ST humanized monoclonal antibody CC49 antigen TAG72 **cancer diagnosis** therapy; carcinoma **diagnosis** therapy humanized Ig heavy light chain TAG72
- IT **Nucleic acids**  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ATCC PTA-5415; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT Tumor antigens  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(TAG-72 (tumor-associated glycoprotein 72); minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT Samples  
(biopsy, autopsy and pathol. specimen; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT **Diagnosis**  
(**cancer**; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT Drug delivery systems  
(carriers; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT Biology  
(cell, host; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(chimeric; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic

use); BIOL (Biological study); **PREP (Preparation);**

**USES (Uses)**

(conjugates; minimally immunogenic variants of **humanized** monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Medical goods**

(containers; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation);** BSU (Biological study, unclassified); **DGN (Diagnostic use);** PRP (Properties); **THU (Therapeutic use);** BIOL (Biological study); **PREP (Preparation);** **USES (Uses)**

(fragments; minimally immunogenic variants of **humanized** monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation);** BSU (Biological study, unclassified); **DGN (Diagnostic use);** PRP (Properties); **THU (Therapeutic use);** BIOL (Biological study); **PREP (Preparation);** **USES (Uses)**

(heavy chain; minimally immunogenic variants of **humanized** monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation);** BSU (Biological study, unclassified); **DGN (Diagnostic use);** PRP (Properties); **THU (Therapeutic use);** BIOL (Biological study); **PREP (Preparation);** **USES (Uses)**

(**humanized**; minimally immunogenic variants of **humanized** monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Drug delivery systems**

(immunoconjugates; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Diagnosis**

(immunodiagnosis; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Drug delivery systems**

(immunotoxins; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Fluorescent substances**

(label; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Radionuclides, biological studies**

RL: BSU (Biological study, unclassified); **DGN (Diagnostic use);** **THU (Therapeutic use);** BIOL (Biological study); **USES (Uses)**

(label; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation);** BSU (Biological study, unclassified); **DGN (Diagnostic use);** PRP (Properties); **THU (Therapeutic use);** BIOL (Biological study); **PREP (Preparation);** **USES (Uses)**

- (light chain; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Containers  
(medical; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Affinity  
Antitumor agents  
Body fluid  
Carcinoma  
DNA sequences  
Drug delivery systems  
Eukaryota  
Genetic vectors  
Human  
Immunotherapy  
Labels  
Mammalia  
Molecular cloning  
Protein sequences  
Test kits  
(minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Toxins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, conjugates; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT Mutagenesis  
(site-directed, substitution; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for cancer diagnosis and therapy)
- IT 145882-24-2 164176-96-9 847664-76-0 847664-77-1 847664-78-2  
847664-79-3 847664-80-6  
RL: PRP (Properties)

(Unclaimed; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT 847710-02-5P 847717-55-9P  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amino acid sequence; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT 141977-02-8P 145060-99-7P 145061-00-3P 164176-98-1P 243655-56-3P  
 243655-58-5P 268230-83-7P 268230-84-8P 268230-85-9P 268230-86-0P  
 268230-88-2P 268230-89-3P 268230-91-7P 373379-16-9P 373379-25-0P  
 847664-67-9P 847664-68-0P 847664-69-1P 847664-70-4P 847664-71-5P  
 847664-72-6P 847664-73-7P 847664-74-8P 847664-87-3P 847664-89-5P  
 847664-91-9P 847664-93-1P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

IT 173480-62-1 268230-87-1 268230-92-8 288319-28-8 847664-75-9  
 847664-97-5 847664-98-6 847664-99-7 847665-00-3 847665-01-4  
 847665-02-5 847719-61-3 847719-62-4 847719-63-5 847719-64-6  
 847719-65-7 847719-66-8 847719-67-9 847719-68-0 847719-69-1  
 847719-70-4 847719-71-5 847719-72-6 847719-73-7 847719-74-8  
 847719-75-9 847719-76-0 847719-77-1 847719-78-2 847719-79-3  
 847719-80-6 847719-81-7

RL: PRP (Properties)

(unclaimed sequence; minimally immunogenic variants of humanized monoclonal anti-TAG-72 antibody CC49 for **cancer diagnosis** and therapy)

L93 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:99630 CAPLUS

DOCUMENT NUMBER: 142:193052

TITLE: Sequences of human SSX-2 peptides presented by HLA class II molecules and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene

INVENTOR(S): Valmori, Danila; Ayyoub, Maha

PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, USA

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005010190	A1	20050203	WO 2004-US23544	20040721
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,			

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

EP 1644501 A1 20060412 EP 2004-778867 20040721

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.: US 2003-489257P P 20030722  
WO 2004-US23544 W 20040721

ED Entered STN: 04 Feb 2005

AB The invention describes HLA class II binding peptides encoded by the SSX-2 tumor associated gene, as well as nucleic acids encoding such peptides and antibodies relating thereto. The peptides stimulate the activity and proliferation of CD4+ T lymphocytes. Methods and products also are provided for diagnosing and treating conditions characterized by expression of the SSX-2 gene.

IC ICM C12N015-12

ICS C07K014-47; A61K038-17; A61K031-70; A61K039-395; A61K035-14;  
G01N033-574

CC 6-3 (General Biochemistry)

Section cross-reference(s): 1, 3, 13

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation) (chimeric; sequences of human SSX-2 peptides presented by HLA class II mols. and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene)

IT **Diagnosis**

(for cancer; sequences of human SSX-2 peptides presented by HLA class II mols. and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene)

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation) (fragments, Fab, F(ab)2, Fv, CDR3 region; sequences of human SSX-2 peptides presented by HLA class II mols. and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene)

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation) (humanized; sequences of human SSX-2 peptides presented by HLA class II mols. and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene)

IT **Antigen-presenting cell**

Antitumor agents

CD4-positive T cell

CD8-positive T cell

Genetic vectors

Human

Peptide library

Protein sequences

T cell (lymphocyte)

cDNA sequences

(sequences of human SSX-2 peptides presented by HLA class II mols. and uses in diagnosis and therapy for conditions relate to expression of SSX-2 gene)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:14436 CAPLUS

DOCUMENT NUMBER: 142:109115

TITLE: Human C-type lectin and anti-human C-type lectin, sequences, recombinant production and therapeutic and diagnostic uses thereof

INVENTOR(S): Van Den Oudenrijn, Sonja; Van Meijer, Marja; Bakker, Adrianus Quirinus; Bakker, Alexander Berthold Henrik

PATENT ASSIGNEE(S): Crucell Holland B.V., Neth.

SOURCE: PCT Int. Appl., 191 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000894	A2	20050106	WO 2004-EP51243	20040625
WO 2005000894	A3	20050707		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004251890	A1	20050106	AU 2004-251890	20040625
CA 2526284	AA	20050106	CA 2004-2526284	20040625
EP 1636265	A2	20060322	EP 2004-741894	20040625
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.:			WO 2003-EP350264	A 20030625
			WO 2004-EP50100	A 20040209
			WO 2004-EP51243	W 20040625

ED Entered STN: 07 Jan 2005

AB The invention provides a novel human C-type lectin that is exclusively expressed in myeloid cells and possesses protein motifs YX1X2M and ITIM (immunotyrosine-based inhibition motif). The invention also provides antibodies capable of binding to said C-type lectin, including single chain Fv fragments (SC02-357, SC02-378 and SC02-161) and several IgG1. The invention further provides: (a) a cDNA mol. encoding said human C-type lectin, and nucleic acid mols. encoding said anti-human C-type lectin antibodies; and (b) immunoconjugate mols. composed of anti-human C-type lectin antibodies and a tag, such as a toxin, enzyme, liposome or radioactive substance. Still further, the invention provides: (a) vectors comprising nucleic acid sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies; (b) use of said vectors in transforming host cells for recombinant production of human C-type lectin and/or said antibodies; (c) use of phage display library to identify said anti-human C-type lectin antibodies; and (d) use of said lectins, antibodies, and immunoconjugates, and transformed host cells in the diagnosis, prevention and/or treatment of neoplastic disorders, such as acute myeloid leukemia and/or other related leukemias. Finally, the invention provides the cDNA and amino acid sequences of human C-type lectin, and amino acid sequences of the CDR3 region ScFv fragments (SC02-357, SC02-378 and SC02-161) and IgG1 antibodies 357, 378 and 161. The invention discussed in the examples, that the human C-type lectin maps to chromosome 12, and that mRNA expression of the gene was

detected only in peripheral blood leukocytes. The human C-type lectin protein was detected only in the spleen.

- IC ICM C07K014-705  
ICS C07K016-18
- CC 6-3 (General Biochemistry)  
Section cross-reference(s): 14, 15, 63
- ST human C type lectin **cdna** sequence; protein sequence C type human motif; lectin C type human antibody IgG1 single chain sequence; diagnosis therapy leukemia C type lectin; therapy diagnosis leukemia C type lectin antibody; immunoconjugate anti human C type lectin antibody diagnosis therapy; acute myeloid leukemia lectin C type antibody immunoconjugate
- IT Protein motifs  
(**CDR3** (complementarity determining region 3) of ScFvs; antibodies specific for human C-type lectin, their sequences, recombinant production and their use in diagnosis, prevention and/or treatment of neoplastic disorders)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN** (Biosynthetic preparation); **BSU** (Biological study, unclassified); **BUU** (Biological use, unclassified); **DGN** (Diagnostic use); **PRP** (Properties); **THU** (Therapeutic use); **BIOL** (Biological study); **PREP** (Preparation); **USES** (Uses)  
(IgG1, anti-human C-type lectin, **heavy chain**, 357, 378 and 161; antibodies specific for human C-type lectin, their sequences, **recombinant** production and their use in diagnosis, prevention and/or treatment of neoplastic disorders)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN** (Biosynthetic preparation); **BSU** (Biological study, unclassified); **BUU** (Biological use, unclassified); **DGN** (Diagnostic use); **PRP** (Properties); **THU** (Therapeutic use); **BIOL** (Biological study); **PREP** (Preparation); **USES** (Uses)  
(anti-human C-type lectin; antibodies specific for human C-type lectin, their sequences, **recombinant** production and their use in diagnosis, prevention and/or treatment of neoplastic disorders)
- IT **cdna** sequences  
(**cdna** mol. encoding novel human C-type lectin, its sequence and use in construction plasmid **vectors** for recombinant protein production)
- IT **Diagnosis**  
(**cancer**; use of human C-type lectin, anti-human C-type lectin antibodies and/or immunoconjugates in **diagnosis**, prevention and/or treatment of neoplastic disorders, such as acute myeloid leukemia)
- IT Animal cell  
(from human, as host cells; **vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT Plasmid **vectors**  
(pPicZbiFVH, used in generation of bivalent scFv; **vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT Plasmid **vectors**  
(pgG102-161C03, used in generation of IgG1; **vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT Plasmid **vectors**  
(pgG102-357C03, used in generation of IgG1; **vectors** comprising **nucleic acid** sequences encoding said



- human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT **Plasmid vectors**  
(pgG102-357C13 in generation of chimeric IgG1; **vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT **Plasmid vectors**  
(pgG102-378C03, used in generation of IgG1; **vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); BUU (Biological use, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
(single chain, Fv fragment, SC02-357, SC02-378 and SC02-161; antibodies specific for human C-type lectin, their sequences, **recombinant** production and their use in diagnosis, prevention and/or treatment of neoplastic disorders)
- IT **Molecular cloning**  
(**vectors** comprising **nucleic acid** sequences encoding said human C-type lectin or said anti-human C-type lectin antibodies, and their use in transforming host cells)
- IT 823572-15-2  
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); **USES (Uses)**  
(nucleotide sequence; **cDNA** mol. encoding novel human C-type lectin, its sequence and use in construction plasmid **vectors** for recombinant protein production)

L93 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:123086 CAPLUS

DOCUMENT NUMBER: 142:217394

TITLE: Combined cancer treatment methods using selected antibodies against aminophospholipids

INVENTOR(S): Thorpe, Philip E.; Huang, Xianming; Ran, Sophia

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US 2004170620	A1	20040902	US 2003-621269	20030715
PRIORITY APPLN. INFO.:			US 2002-396263P	P 20020715
			US 2003-621269	A2 20030715

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AB The invention provides new methods and compns. for safe and effective tumor vascular targeting, anti-angiogenesis and tumor destruction, which methods and compns. are also surprisingly effective in treating viral infections and related diseases. The invention is based, in part, on discoveries concerning the expression and role of anionic phospholipids in tumor vasculature and the involvement of aminophospholipids and anionic

phospholipids in viral entry, replication and spread. The present invention further provides particularly advantageous antibodies and immunoconjugates that bind to aminophospholipids and anionic phospholipids, and a new class of peptide-based derivs., such as duramycin-based compns., that bind to phosphatidylethanolamine.

IC ICM A61K039-395  
 INCL 424155100  
 CC 15-3 (Immunochemistry)  
 Section cross-reference(s): 1, 63  
 ST antibody aminophospholipid duramycin immunoconjugate **diagnosis cancer** viral infection; anticancer antiviral antibody  
 aminophospholipid duramycin immunoconjugate  
 IT **DNA sequences**  
     **Protein sequences**  
     (3G4 antibody-specifying; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Ricins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (A, deglycosylated; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Chemokines  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (C-X-C, ELR (Glu-Leu-Arg); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT CD antigens  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (CD106; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (IgG; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Viscum album coloratum  
 (Korean mistletoe, extract; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Leukemia inhibitory factor  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (LIF; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Chemokines  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Mig (monokine induced by interferon- $\gamma$ ); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)  
 IT Proteins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (RIP (ribosome-inactivating protein); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

- IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(SDF-1 (stromal-derived factor-1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(TRAIL (tumor necrosis factor-related apoptosis-inducing ligand); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Annexins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(V; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cell adhesion molecules  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(VCAM-1 (vascular cell adhesion mol. 1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Phospholipids, biological studies  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(acidic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(aerosols; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
(agents, antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Phospholipids, biological studies  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(amine-containing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Alkylating agents, biological  
Angiogenesis inhibitors  
Antibiotics  
Antitumor agents  
Antiviral agents  
Blood analysis  
Chemotherapy  
Coagulants  
Combination chemotherapy  
Cytotoxic agents  
Hodgkin's disease  
Human  
Imaging agents  
Immunotherapy  
Neoplasm  
Radiotherapy  
Tumor **markers**

- (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cardiolipins  
 Nucleosides, biological studies  
 Phosphatidic acids  
 Phosphatidylethanolamines, biological studies  
 Phosphatidylglycerols  
 Phosphatidylinositols  
 Phosphatidylserines  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Fusion proteins (chimeric proteins)  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Radionuclides, biological studies  
 RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Anthracyclines  
 Cytokines  
 Glucocorticoids  
 Interferons  
 Interleukin 12  
 Osteonectin  
 Retinoids  
 Steroids, biological studies  
 Taxanes  
 Thrombospondins  
 Tumor necrosis factors  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT CD20 (antigen)  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (antibodies to; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drugs  
 (antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cytotoxic agents  
 (antimetabolites; aminophospholipid-specific antibodies,

- immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (bispecific; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
 (cancer; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
 (carriers; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Annexins  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Imaging  
 X-ray  
 (diagnostic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Toxins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (diphtheria; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Blood vessel  
 (endothelium, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Immunoassay  
 (enzyme-linked immunosorbent assay; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Toxins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (exotoxins, Pseudomonas; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (fragments, Fv, Fab', Fab, diabody, linear antibody or F(ab'), CDR, univalent fragment; aminophospholipid-specific antibodies,

- immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**humanized**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(immunoconjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
(immunodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(immunotoxins; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Human herpesvirus 5  
(infection; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Tubulins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(injections, i.v.; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(interferon  $\gamma$ -inducible protein-10, IP-10; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT NMR (nuclear magnetic resonance)  
(isotopes; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins

- RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 3G4, (ATCC PTA 4545); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Fibronectins  
Laminins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(peptides; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Toxins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(plant-, fungus- or bacteria-derived; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(prodrugs; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cytokines  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(proinflammatory; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
(serodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(single chain, scFv; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Neoplasm  
(solid; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Apoptosis  
(tumor cell, inducing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Endothelium  
(vascular, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Angiogenic factors  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(vasculostatin; aminophospholipid-specific antibodies, immunoconjugates

- and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Alkaloids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(vinca; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Infection  
(viral; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\alpha$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Integrins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
( $\alpha v \beta 3$ , antagonists; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Transforming growth factors  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta 1$ -; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\gamma$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 92769-12-5, Proliferin (protein)  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(-related protein; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9002-62-4, Prolactin, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(16 kDa, fragment; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 840253-36-3DP, humanized or chimeric derivs. and conjugates  
840253-38-5P, 4: PN: US20050031620 SEQID: 4 claimed protein  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 140208-23-7 142243-03-6  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9035-58-9, Blood-coagulation factor III



RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 54-42-2, Idoxuridine 70-00-8, Trifluorothymidine 127-07-1, Hydroxyurea 768-94-5, Amantadine 1391-36-2D, Duramycin, conjugates 2056-98-6 3056-17-5, Stavudine 5536-17-4, Vidarabine 7481-89-2, Zalcitabine 13392-28-4, Rimantadine 30516-87-1, AZT 36791-04-5, Ribavirin 39809-25-1, Penciclovir 59277-89-3, Acyclovir 69655-05-6, Didanosine 77181-69-2, Sorivudine 82410-32-0, Gancyclovir 113852-37-2, Cidofovir 114977-28-5, Docetaxel 120082-86-2 127779-20-8, Saquinavir 129556-87-2, Adefovir diphosphate 129618-40-2, Nevirapine 134678-17-4, Lamivudine 136470-78-5, Abacavir 136817-59-9, Delavirdine 139110-80-8, Zanamivir 142340-99-6, Adefovir dipivoxil 142937-65-3 143188-53-8, Lamivudine triphosphate 145819-92-7, Emtricitabine triphosphate 150378-17-9, Indinavir 154598-52-4, Efavirenz 155213-67-5, Ritonavir 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 196618-13-0, Oseltamivir 717854-15-4, Multinucleoside resistance A 717854-16-5, Multinucleoside resistance B

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 50-02-2, Dexamethasone 50-18-0, Cyclophosphamide 50-35-1, Thalidomide 50-76-0, Actinomycin D 51-21-8, Fluorouracil 53-06-5, Cortisone 53-79-2, Puromycin 55-86-7, Nitrogen mustard 57-22-7, Vincristine 59-05-2, Methotrexate 64-86-8, Colchicine 66-22-8, Uracil, biological studies 66-81-9, Cycloheximide 67-99-2, Aspergillin 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3, Melphalan 305-03-3, Chlorambucil 362-07-2 477-30-5, Colcemid 865-21-4, Vinblastine 1404-00-8, Mitomycin 1404-04-2, Neomycin 1406-72-0, Restrictocin 1407-48-3,  $\alpha$ -Sarcin 2998-57-4, Estramustine 4375-07-9, Epipodophyllotoxin 7689-03-4, Camptothecin 9001-67-6D, Neuraminidase, antibody conjugates 9001-78-9D, Alkaline phosphatase, antibody conjugates 9001-99-4, Ribonuclease 9004-08-4D, Cathepsin, antibody conjugates 9014-01-1D, Subtilisin, antibody conjugates 9014-06-6D, Penicillin amidase, antibody conjugates 9015-68-3, L-Asparaginase 9016-17-5D, Arylsulfatase, antibody conjugates 9025-05-2D, Cytosine deaminase, antibody conjugates 9031-11-2D,  $\beta$ -Galactosidase, antibody conjugates 9031-98-5D, Carboxypeptidase, antibody conjugates 9073-60-3D, antibody conjugates 9073-78-3D, Thermolysin, antibody conjugates 9077-67-2D, D-Alanine carboxypeptidase, antibody conjugates 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 15663-27-1, Cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin 21679-14-1, Fludarabine 23110-15-8, Fumagillin 23214-92-8, Doxorubicin 25316-40-9, Adriamycin 29767-20-2, Teniposide 31441-78-8, Mercaptopurine 33069-62-4, Paclitaxel 33419-42-0, Etoposide 37270-94-3, Platelet factor 4 37312-62-2D, Serratia extracellular proteinase, antibody conjugates 56420-45-2, Epirubicin 62996-74-1, Staurosporine 65271-80-9, Mitoxantrone 65646-68-6, Fenretinide 70641-51-9, Edelfosine 74578-38-4, UFT 75037-46-6, Gelonin 82855-09-2, Combretastatin 83150-76-9, Octreotide 84088-42-6, Linomide 86090-08-6, Angiostatin 95058-81-4, Gemcitabine 97682-44-5, Irinotecan 98319-26-7, Finasteride 112953-11-4, 7-Hydroxystaurosporine 123948-87-8, Topotecan 129298-91-5, AGM-1470 146426-40-6, Flavopiridol 156511-34-1, L 739749 160141-09-3, L-744832 187888-07-9, Endostatin 188417-67-6, CM 101 (polysaccharide) 220127-57-1, STI571

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- (aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9034-40-6, LHRH  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonists; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 80449-01-0, Topoisomerase 124861-55-8, TIMP 2 140208-24-8, TIMP 1 145809-21-8, TIMP 3 186207-03-4, TIMP 4  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9068-38-6, Reverse transcriptase 144114-21-6, HIV protease  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 840253-35-2DP, humanized or chimeric derivs. and conjugates 840253-37-4P, 3: PN: US20050031620 SEQID: 3 claimed **DNA**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 840253-32-9  
 RL: PRP (Properties) (unclaimed nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 840253-34-1  
 RL: PRP (Properties) (unclaimed **protein sequence**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 650591-60-9 716329-62-3 840253-33-0  
 RL: PRP (Properties) (unclaimed sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

L93 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:15790 CAPLUS

DOCUMENT NUMBER: 142:112458

TITLE: Combinations and kits for **cancer** treatment and **diagnosis** using selected antibodies to aminophospholipids

INVENTOR(S): Thorpe, Philip E.; Huang, Xianming; Ran, Sophia

PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA

SOURCE: U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. Ser. No. 621,269.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 17

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005002941	A1	20050106	US 2003-642116	20030815
US 2004170620	A1	20040902	US 2003-621269	20030715
PRIORITY APPLN. INFO.:			US 2002-396263P	P 20020715
			US 2003-621269	A2 20030715

ED Entered STN: 07 Jan 2005

AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases.

IC ICM A61K039-395  
ICS C07K016-46; C07K016-30

INCL 424178100; 530388800; 530391100

CC 15-3 (Immunochemistry)  
Section cross-reference(s): 1, 3, 13, 14, 63

ST antibody aminophospholipid duramycin immunoconjugate **diagnosis** therapy **cancer** viral infection

IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(C-X-C, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ELR, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Mig (monokine induced by interferon- $\gamma$ ), secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(SDF-1 (stromal-derived factor-1), secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(TRAIL (tumor necrosis factor-related apoptosis-inducing ligand), secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT **Diagnosis**  
(agents, antibody conjugates; combinations and kits for **cancer** treatment using selected antibodies to aminophospholipids)

IT Cytotoxic agents  
(antimetabolites, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

IT Phosphatidylserines  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU

- (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (as **marker** of tumor vascularization; combinations and kits  
 for cancer treatment using selected antibodies to aminophospholipids)
- IT Cardiolipins  
 Phosphatidic acids  
 Phosphatidylethanolamines, biological studies  
 Phosphatidylglycerols  
 Phosphatidylinositols  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (as tumor and infection **markers**; combinations and kits for  
 cancer treatment using selected antibodies to aminophospholipids)
- IT Antibodies and Immunoglobulins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bispecific, diabody, to phospholipids; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT **Diagnosis**  
 (**cancer**; combinations and kits for **cancer** treatment  
 using selected antibodies to aminophospholipids)
- IT **Antibodies and Immunoglobulins**  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use);  
**THU (Therapeutic use)**; BIOL (Biological study); **USES**  
**(Uses)**  
 (**chimeric**, to phospholipids; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT Toxins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (diphtheria, secondary antitumor agent; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT Blood vessel  
 (endothelium, phospholipids as **markers** of; combinations and  
 kits for cancer treatment using selected antibodies to  
 aminophospholipids)
- IT Antibodies and Immunoglobulins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (engineered, to phospholipids; antibodies specific to aminophospholipid  
 and immunoconjugates for **diagnosis** and treatment of  
**cancer** and viral infection)
- IT Viscum album coloratum  
 (extract, secondary antitumor agent; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT Fibronectins  
 Laminins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fragment, secondary antitumor agent; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fragments, **CDR**, to phospholipids; antibodies specific to  
 aminophospholipid and immunoconjugates for **diagnosis** and  
 treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins

- RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, F(ab')<sub>2</sub>, to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, Fab, to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, Fab', to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, Fv, to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, antigen-binding, to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fragments, scFv, to phospholipids; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**humanized**; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT **Diagnosis**  
(immunodiagnosis; combinations and kits for **cancer** treatment using selected antibodies to aminophospholipids)
- IT Apoptosis  
(inducing agent, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Tubulins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(inhibiting drug, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)

- IT Translation, genetic  
(inhibitors, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT CD20 (antigen)  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(inhibitors, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(interferon  $\gamma$ -inducible protein-10, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 1B12, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 1B9, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 2G7, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 3B10, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 3SB, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, 7C5, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

- (monoclonal, 9D2, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Antibodies and Immunoglobulins  
 RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (monoclonal, D11, anti-phosphatidylserine; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT **Protein sequences**  
 cDNA sequences  
 (of antibodies to aminophospholipids, of mouse; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Tumor **markers**  
 (phospholipids as; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Cytokines  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (proinflammatory, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Angiogenesis inhibitors  
 Drugs  
 Radiopharmaceuticals  
 (secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Cytokines  
 Glucocorticoids  
 Interleukin 12  
 Leukemia inhibitory factor  
 Osteonectin  
 Retinoids  
 Taxanes  
 Thrombospondins  
 Tumor necrosis factors  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Endothelium  
 (vascular, phospholipids as **markers** of; combinations and kits for cancer treatment using selected antibodies to aminophospholipids)
- IT Angiogenic factors  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vasculostatin, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Alkaloids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vinca, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Interferons  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 ( $\alpha$ , secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Integrins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

- ( $\alpha\beta 3$ , secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ , secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Transforming growth factors  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta 1$ -, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\gamma$ , secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 821913-73-9P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 821913-71-7P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 9034-40-6, LHRH  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antagonist, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 7440-70-2, Calcium, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(flux inducing drug, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 80449-01-0, Topoisomerase  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(inhibitors, secondary antitumor agent; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 821913-72-8 821913-74-0  
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nucleotide sequence; antibodies specific to aminophospholipid and immunoconjugates for **diagnosis** and treatment of **cancer** and viral infection)
- IT 50-02-2, Dexamethasone 50-18-0, Cyclophosphamide 50-35-1, Thalidomide 50-44-2, 6-Mercaptopurine 50-76-0, Actinomycin D 50-91-9, 5-Fluoro-2'-deoxyuridine 51-21-8, Fluorouracil 53-06-5, Cortisone 53-79-2, Puromycin 55-86-7, Nitrogen mustard 57-22-7, Vincristine 59-05-2, Methotrexate 64-86-8, Colchicine 66-22-8, Uracil, biological studies 66-81-9, Cycloheximide 127-07-1, Hydroxyurea 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3, Melphalan 305-03-3,



Chlorambucil 362-07-2 477-30-5, Colcemid 518-28-5, Podophyllotoxin  
 865-21-4, Vinblastine 1404-00-8, Mitomycin 1404-04-2, Neomycin  
 2998-57-4, Estramustine 7689-03-4, Camptothecin 9015-68-3,  
 L-Asparaginase 10540-29-1, Tamoxifen 11056-06-7, Bleomycin  
 15663-27-1, Cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin  
 21679-14-1, Fludarabine 23110-15-8, Fumagillin 23214-92-8, Doxorubicin  
 25316-40-9, Adriamycin 29767-20-2, Teniposide 33069-62-4, Taxol  
 33419-42-0, Etoposide 37270-94-3, Platelet factor 4 56420-45-2,  
 Epirubicin 62996-74-1, Staurosporine 65271-80-9, Mitoxantrone  
 65646-68-6, Fenretinide 70641-51-9, Edelfosine 74578-38-4, UFT  
 83150-76-9, Octreotide 84088-42-6, Linomide 86090-08-6, Angiostatin  
 92769-12-5, Proliferin 95058-81-4, Gemcitabine 97682-44-5, Irinotecan  
 98319-26-7, Finasteride 112953-11-4, UCN-01 114977-28-5, Docetaxel  
 123948-87-8, Topotecan 124861-55-8 129298-91-5, TNP-470 140208-23-7,  
 Plasminogen activator inhibitor 1 140208-24-8 142243-03-6, Plasminogen  
 activator inhibitor 2 145809-21-8 146426-40-6, Flavopiridol  
 156511-34-1, L 739749 160141-09-3, L-744832 186207-03-4 187888-07-9,  
 Endostatin 188417-67-6, CM 101 (polysaccharide) 220127-57-1, STI571  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(secondary antitumor agent; antibodies specific to aminophospholipid  
 and immunoconjugates for **diagnosis** and treatment of  
**cancer** and viral infection)

IT 821917-66-2

RL: PRP (Properties)

(unclaimed nucleotide sequence; combinations and kits for  
**cancer** treatment and **diagnosis** using selected  
 antibodies to aminophospholipids)

IT 821917-67-3 821917-68-4

RL: PRP (Properties)

(unclaimed **protein sequence**; combinations and kits  
 for **cancer** treatment and **diagnosis** using selected  
 antibodies to aminophospholipids)

IT 650591-60-9 716329-62-3

RL: PRP (Properties)

(unclaimed sequence; combinations and kits for **cancer**  
 treatment and **diagnosis** using selected antibodies to  
 aminophospholipids)

L93 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:817650 CAPLUS

DOCUMENT NUMBER: 141:330779

TITLE: Human monoclonal, bispecific antibodies and fragments  
 specific to TIM-1 antigen for **cancer**  
**diagnosis** and therapy

INVENTOR(S): Landes, Gregory M.; Chen, Francine; Bezabeh, Binyam;  
 Foltz, Ian

PATENT ASSIGNEE(S): Abgenix, Inc., USA

SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004084823	A2	20041007	WO 2004-US8502	20040319
WO 2004084823	A3	20050915		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
 TD, TG

AU 2004224390	A1	20041007	AU 2004-224390	20040319
CA 2519528	AA	20041007	CA 2004-2519528	20040319
US 2005084449	A1	20050421	US 2004-805177	20040319
EP 1613750	A2	20060111	EP 2004-757910	20040319

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.:

US 2003-456652P P 20030319  
 WO 2004-US8502 W 20040319

ED Entered STN: 07 Oct 2004

AB The invention described herein is related to antibodies directed to the antigen TIM-1 (i.e. T cell Ig domain and mucin domain 1) and uses of such antibodies. In particular, there are provided fully human monoclonal antibodies directed to the antigen TIM-1. Isolated polynucleotide sequences encoding, and amino acid sequences comprising, heavy and light chain Ig mols., particularly sequences corresponding to contiguous heavy and light chain sequences spanning the framework regions (FR's) and/or complementarity determining regions (CDR's), specifically from FR1 through FR4 or CDR1 through CDR3, are provided. Hybridomas or other cell lines expressing such Ig mols. and monoclonal antibodies are also provided. The antibodies may also be chimeric, humanized, bispecific or scFv, Fab, etc. fragments. These antibodies are conjugated with toxin, radioisotope, chemotherapeutic agent or therapeutic agent for diagnosis and treatment of cancer and inflammation.

IC ICM A61K

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3, 9, 63

ST chimeric humanized human monoclonal antibody fragment TIM1 antigen **cancer**; inflammation carcinoma **cancer diagnosis** therapy antibody human TIM1 antigen; antibody T cell Ig domain and mucin domain 1

IT Animal cell line

(CHO; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (IgG2; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (IgG4; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT Immunoassay

(KinExA and BIACORE; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antigens

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

- DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(TIM-1; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Gene, animal  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(VH3-33 germline; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(bispecific; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT **Diagnosis**  
(**cancer**; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Lung, neoplasm  
Ovary, neoplasm  
Prostate gland, neoplasm  
Stomach, neoplasm  
(carcinoma; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Drug delivery systems  
(carriers; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(chimeric; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Intestine, neoplasm  
(colon, carcinoma; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma  
Intestine, neoplasm  
(colon; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins  
Radionuclides, biological studies  
Toxins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(conjugates; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Medical goods  
(containers; human monoclonal, bispecific antibodies and fragments

- specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Imaging agents
  - (contrast, radiog., label; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Uterus, neoplasm
  - (endometrium; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
  - (fragments; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma
  - (gastric; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Neuroglia, neoplasm
  - (glioblastoma; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Neoplasm
  - Neoplasm
  - (head and neck; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
  - (**heavy chain**; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Affinity
  - Animal cell
  - Animal tissue
  - Antitumor agents
  - Biomarkers**
  - Bladder, neoplasm
  - Brain, neoplasm
  - Carcinoma
  - Cell proliferation
  - Chemotherapy
  - DNA sequences**
  - Dissociation constant
  - Drugs
  - Epitopes
  - Esophagus, neoplasm
  - Head and Neck, neoplasm
  - Head and Neck, neoplasm
  - Human
  - Hybridoma
  - Immunotherapy
  - Inflammation
  - Kidney, neoplasm
  - Labels

Liver, neoplasm  
 Lung, neoplasm  
 Lymphoma  
 Mammalia  
 Medical goods  
 Melanoma  
 Molecular cloning  
 Mus  
 Neoplasm  
 Oryctolagus cuniculus  
 Ovary, neoplasm  
 Prostate gland, neoplasm

**Protein sequences**

Stomach, neoplasm

Test kits

(human monoclonal, bispecific antibodies and fragments specific to  
 TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antibodies and Immunoglobulins

Gene, animal

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)

(human monoclonal, bispecific antibodies and fragments specific to  
 TIM-1 antigen for **cancer diagnosis** and therapy)

IT CD3 (antigen)

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)

(human monoclonal, bispecific antibodies and fragments specific to  
 TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); DGN (Diagnostic use); PRP (Properties); THU  
 (Therapeutic use); BIOL (Biological study); PREP  
 (Preparation); USES (Uses)

(humanized; human monoclonal, bispecific antibodies and  
 fragments specific to TIM-1 antigen for **cancer  
 diagnosis** and therapy)

IT Drug delivery systems

(immunoconjugates; human monoclonal, bispecific antibodies and  
 fragments specific to TIM-1 antigen for **cancer  
 diagnosis** and therapy)

IT **Diagnosis**

(immunodiagnosis; human monoclonal, bispecific antibodies and fragments  
 specific to TIM-1 antigen for **cancer diagnosis** and  
 therapy)

IT Drug delivery systems

(immunotoxins; human monoclonal, bispecific antibodies and fragments  
 specific to TIM-1 antigen for **cancer diagnosis** and  
 therapy)

IT Fluorescent substances

(label; human monoclonal, bispecific antibodies and fragments specific  
 to TIM-1 antigen for **cancer diagnosis** and therapy)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)

(**light chain**; human monoclonal, bispecific  
 antibodies and fragments specific to TIM-1 antigen for **cancer  
 diagnosis** and therapy)

IT Epitopes

- (mapping; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Containers  
(medical; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal, neutralizing; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(monoclonal; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(neutralizing; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma  
(ovarian; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma  
(prostatic; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma  
(pulmonary; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Kidney, neoplasm  
(renal cell carcinoma; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT Carcinoma  
(renal cell; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)
- IT 773172-20-6P 773172-32-0P 773172-34-2P 773172-36-4P 773172-38-6P  
773172-40-0P 773172-42-2P 773172-44-4P 773172-46-6P 773172-48-8P  
773172-50-2P 773172-52-4P 773172-54-6P 773172-56-8P 773172-58-0P  
773172-60-4P 773172-62-6P 773172-64-8P 773172-66-0P 773172-68-2P  
773172-70-6P 773172-71-7P 773172-73-9P 773172-75-1P 773172-77-3P  
773172-79-5P 773172-81-9P 773172-83-1P 773172-84-2P 773172-85-3P  
773172-86-4P 773172-87-5P 773172-88-6P 773172-89-7P 773172-90-0P  
773172-91-1P 773172-92-2P 773172-93-3P 773172-94-4P 773172-95-5P  
773172-96-6P 773172-97-7P 773172-98-8P 773172-99-9P 773173-00-5P  
773173-01-6P 773173-02-7P 773173-03-8P 773173-04-9P 773173-06-1P  
773173-08-3P 773173-09-4P 773173-10-7P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amino acid sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773173-12-9

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (amino acid sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773055-75-7

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773158-10-4P 773172-31-9P 773172-33-1P 773172-35-3P 773172-37-5P  
 773172-39-7P 773172-41-1P 773172-43-3P 773172-45-5P 773172-47-7P  
 773172-49-9P 773172-51-3P 773172-53-5P 773172-55-7P 773172-57-9P  
 773172-59-1P 773172-61-5P 773172-63-7P 773172-65-9P 773172-67-1P  
 773172-69-3P 773172-72-8P 773172-74-0P 773172-76-2P 773172-78-4P  
 773172-80-8P 773172-82-0P 773173-05-0P 773173-07-2P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (nucleotide sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773173-11-8

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nucleotide sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773173-89-0 773173-90-3 773173-91-4 773173-92-5

RL: PRP (Properties)  
 (unclaimed nucleotide sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

IT 773055-76-8 773055-77-9 773055-78-0 773055-79-1 773055-80-4  
 773055-81-5 773055-82-6 773055-83-7 773055-84-8 773055-85-9  
 773055-86-0 773055-87-1 773055-88-2 773055-89-3 773055-90-6  
 773055-91-7 773055-92-8 773055-93-9 773173-65-2 773173-66-3  
 773173-67-4 773173-68-5 773173-69-6 773173-70-9 773173-71-0  
 773173-72-1 773173-73-2 773173-74-3 773173-75-4 773173-76-5  
 773173-77-6 773173-78-7 773173-79-8 773173-80-1 773173-81-2  
 773173-82-3 773173-83-4 773173-84-5 773173-85-6 773173-86-7  
 773173-87-8 773173-88-9

RL: PRP (Properties)  
 (unclaimed sequence; human monoclonal, bispecific antibodies and fragments specific to TIM-1 antigen for **cancer diagnosis** and therapy)

L93 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:696390 CAPLUS

DOCUMENT NUMBER: 141:224000

TITLE: CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer

INVENTOR(S): Lawson, Alastair David Griffiths; Popplewell, Andrew

PATENT ASSIGNEE(S): George  
 SOURCE: Celltech R & D Limited, UK  
 PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004072116	A2	20040826	WO 2004-GB463	20040206
WO 2004072116	A3	20041118		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004210776	A1	20040826	AU 2004-210776	20040206
CA 2515474	AA	20040826	CA 2004-2515474	20040206
EP 1597282	A2	20051123	EP 2004-708808	20040206
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2004007233	A	20060131	BR 2004-7233	20040206
NO 2005004223	A	20051108	NO 2005-4223	20050912
PRIORITY APPLN. INFO.:			GB 2003-3337	A 20030213
			WO 2004-GB463	A 20040206

ED Entered STN: 26 Aug 2004

AB The invention relates to murine monoclonal antibody IC8 and antibody mols. derived from IC8 having specificity for antigenic determinants of human IL-1 $\beta$ . The CDR-grafted/humanized IC8 antibodies and fragments are useful for treating IL-1 $\beta$ -associated inflammatory disease, such as infection, endotoxic shock, arthritis, rheumatoid arthritis, pelvic inflammatory disease, multiple sclerosis, asthma, osteoarthritis, psoriasis, Alzheimer's disease, Crohn's disease, Peyronies's disease, heart disease, atherosclerosis, colon cancer, coeliac disease, gallbladder disease, Pilonidal disease, autoimmune disease and others.

IC ICM C07K016-24

ICS C12N015-13; C12N015-85; C12N005-10; A61K039-395

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3, 63

IT **Antibodies and Immunoglobulins**

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (IgG; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)

IT **Antibodies and Immunoglobulins**

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fragments; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)

IT **Antibodies and Immunoglobulins**

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (heavy chain, variable; humanized or



CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)

- IT Alzheimer's disease
- Amino group
- Antitumor agents
- Arthritis
- Asthma
- Atherosclerosis
- Autoimmune disease
- Celiac disease
- DNA sequences
- Gallbladder, disease
- Genetic **vectors**
- Heart, disease
- Human
- Infection
- Inflammation
- Molecular cloning
- Multiple sclerosis
- Mus
- Neoplasm
- Osteoarthritis
- Osteoporosis
- Pain
- Protein sequences
- Psoriasis
- Rheumatoid arthritis
- Surgery
- Transplant rejection
- cDNA sequences
  - (humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)
- IT **Antibodies and Immunoglobulins**
  - RL: BSU (Biological study, unclassified); PRP (Properties); **THU** (Therapeutic use); BIOL (Biological study); **USES (Uses)** (humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)
- IT **Antibodies and Immunoglobulins**
  - RL: BSU (Biological study, unclassified); PRP (Properties); **THU** (Therapeutic use); BIOL (Biological study); **USES (Uses)** (humanized; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)
- IT **Antibodies and Immunoglobulins**
  - RL: BSU (Biological study, unclassified); PRP (Properties); **THU** (Therapeutic use); BIOL (Biological study); **USES (Uses)** (light chain, variable; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)
- IT **Antibodies and Immunoglobulins**
  - RL: BSU (Biological study, unclassified); PRP (Properties); **THU** (Therapeutic use); BIOL (Biological study); **USES (Uses)** (monoclonal; humanized or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)
- IT **Antibodies and Immunoglobulins**

RL: BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **USES (Uses)** (neutralizing; **humanized** or CDR-grafted antibodies and fragments specific to human interleukin 1 $\beta$  for treating inflammation, infection, autoimmune disease and cancer)

L93 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:633951 CAPLUS

DOCUMENT NUMBER: 141:156116

TITLE: Phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies

INVENTOR(S): Bond, Christopher J.

PATENT ASSIGNEE(S): Genentech, Inc., USA

SOURCE: PCT Int. Appl., 238 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004065416	A2	20040805	WO 2004-US1097	20040116
WO 2004065416	A3	20050210		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004205631	A1	20040805	AU 2004-205631	20040116
CA 2510003	AA	20040805	CA 2004-2510003	20040116
US 2005079574	A1	20050414	US 2004-759731	20040116
EP 1585767	A2	20051019	EP 2004-702925	20040116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2003-441059P	P 20030116
			US 2003-488610P	P 20030718
			US 2003-510314P	P 20031008
			WO 2004-US1097	W 20040116

ED Entered STN: 06 Aug 2004

AB The invention provides Ig polypeptides comprising variant amino acids in CDRs of antibody variable domains. In one embodiment, the polypeptide is a variable domain of a monobody and has a variant CDRH3 region. These polypeptides provide a source of great sequence diversity that can be used as a source for identifying novel antigen binding polypeptides. The invention also provides these polypeptides as fusion polypeptides to heterologous polypeptides such as at least a portion of phage or viral coat proteins, tags and linkers. Libraries comprising a plurality of these polypeptides are also provided. In addition, methods of and compns. for generating and using these polypeptides and libraries are provided. In example, vector pD1607 encoding anti-her2 humanized antibody 4D5 light chain and heavy chain variable domain sequences scFv, scFvzip, Fab, and Fabzip were constructed for maximizing diversity in the CDR L1-3 and H1-3 regions while minimizing structural perturbations. Similarly, recombinant antibodies comprising Ilamma anti-hCG Camelid monobody variable domain (VHH) were constructed and the amino acid preferences in CDRH3 were identified.

IC ICM C07K016-00

ICS C12N015-13; C12N015-85; C12N005-10

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT **Antibodies and Immunoglobulins**

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(chimeric; phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

IT **Antibodies and Immunoglobulins**

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(heavy chain; phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

IT **Antibodies and Immunoglobulins**

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(humanized; phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

IT **Antibodies and Immunoglobulins**

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(light chain; phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

IT **Genetic vectors**

(pS1607; phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

IT **Animal virus**

Camelidae

DNA sequences

Human

Immunoassay

Immunotherapy

Linking agents

Molecular cloning

Mutagenesis

Phage display library

Protein sequences

Test kits

(phage display libraries encoding antibody variable domains with diversified CDRs for identifying high affinity therapeutic and diagnostic antibodies)

L93 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:162801 CAPLUS

DOCUMENT NUMBER: 140:216176

TITLE: Antibodies directed to MCP-1 or monocyte chemoattractant protein-1 for diagnosis and treatment

of inflammatory and neoplastic diseases  
 INVENTOR(S): Gudas, Jean M.; Haak-frendscho, Mary; Foord, Orit;  
 Liang, Meina L.; Ahluwalia, Kiran; Bhakta, Sunil  
 PATENT ASSIGNEE(S): Abgenix, Inc., USA  
 SOURCE: PCT Int. Appl., 154 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004016769	A2	20040226	WO 2003-US26232	20030819
WO 2004016769	A3	20041014		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2496419	AA	20040226	CA 2003-2496419	20030819
US 2005058639	A1	20050317	US 2003-644277	20030819
EP 1542724	A2	20050622	EP 2003-788686	20030819
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2005536534	T2	20051202	JP 2004-529174	20030819
PRIORITY APPLN. INFO.:			US 2002-404802P	P 20020819
			WO 2003-US26232	W 20030819

ED Entered STN: 29 Feb 2004

AB Embodiments of the invention described herein relate to antibodies directed to the antigen monocyte chemoattractant protein-1 (MCP-1) and uses of such antibodies. In particular, in accordance with some embodiments, there are provided fully human monoclonal antibodies directed to the antigen MCP-1. Nucleotide sequences encoding, and amino acid sequences comprising, heavy and light chain Ig mols., particularly sequences corresponding to contiguous heavy and light chain sequences spanning the framework regions and/or complementarity determining regions (CDRs), specifically from FR1 through FR4 or CDR1 through CDR3, are provided. Hybridomas or other cell lines expressing such Ig mols. and monoclonal antibodies are also provided.

IC ICM C12N

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3, 9, 63

ST monoclonal antibody hybridoma monocyte chemoattractant protein 1 cancer inflammation; MCP1 human monoclonal antibody heavy **light chain** cancer inflammation

IT Animal cell

Animal cell line

Animal tissue

Animals

Antitumor agents

Atherosclerosis

Autoimmune disease

**Biomarkers**

Bladder, neoplasm

Blood analysis  
 Blood serum  
 Chemotherapy  
 Cytotoxic agents  
 Drugs  
 Fluorescent dyes  
 Human  
 Hybridoma  
 Immunoassay  
 Immunotherapy  
 Inflammation  
 Kidney, neoplasm  
 Leukemia  
 Lung, neoplasm  
 Mammalia  
 Mammary gland, neoplasm  
 Melanoma  
 Molecular cloning  
 Multiple sclerosis  
 Neoplasm  
 Ovary, neoplasm  
 Pancreas, neoplasm  
 Prostate gland, neoplasm  
     **Protein sequences**  
 Psoriasis  
 Rheumatoid arthritis  
 Salivary gland, neoplasm  
 Stomach, neoplasm  
 Test kits  
 Thyroid gland, neoplasm  
 Transplant and Transplantation  
     **cDNA sequences**  
         (antibodies directed to MCP-1 or monocyte chemoattractant protein-1 for  
         diagnosis and treatment of inflammatory and neoplastic diseases)  
 IT   **Diagnosis**  
         (**cancer**; antibodies directed to MCP-1 or monocyte  
         chemoattractant protein-1 for **diagnosis** and treatment of  
         inflammatory and neoplastic diseases)  
 IT   **Antibodies and Immunoglobulins**  
         RL: BPN (Biosynthetic preparation); BSU (Biological study,  
         unclassified); DGN (Diagnostic use); PRP (Properties); THU  
         (Therapeutic use); BIOL (Biological study); PREP  
         (Preparation); USES (Uses)  
         (**chimeric**; antibodies directed to MCP-1 or monocyte  
         chemoattractant protein-1 for diagnosis and treatment of inflammatory  
         and neoplastic diseases)  
 IT   Antibodies and Immunoglobulins  
         RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
         DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL  
         (Biological study); PREP (Preparation); USES (Uses)  
         (**heavy chain**; antibodies directed to MCP-1 or  
         monocyte chemoattractant protein-1 for diagnosis and treatment of  
         inflammatory and neoplastic diseases)  
 IT   Antibodies and Immunoglobulins  
         RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
         DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL  
         (Biological study); PREP (Preparation); USES (Uses)  
         (**light chain**; antibodies directed to MCP-1 or  
         monocyte chemoattractant protein-1 for diagnosis and treatment of  
         inflammatory and neoplastic diseases)

L93 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:2228 CAPLUS  
 DOCUMENT NUMBER: 142:92198  
 TITLE: CDR-containing chimeric ThyOx polypeptides for therapeutic use  
 INVENTOR(S): Evans, Glen A.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 45 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004266993	A1	20041230	US 2003-611655	20030630
WO 2005012481	A2	20050210	WO 2004-US21286	20040630
WO 2005012481	A3	20050714		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-611655 A 20030630

ED Entered STN: 31 Dec 2004

AB The invention provides a chimeric non-Ig binding polypeptide having an Ig-like domain containing scaffold having two or more solvent exposed loops containing a different CDR from a parent antibody inserted into each of said two or more loops and exhibiting selective binding activity toward a ligand bound by said parent antibody. The chimeric non-Ig binding polypeptide has an Ig-like domain containing scaffold having less than about 20% sequence identity to a human Ig variable region framework domain, said Ig-like domain containing scaffold having two or more altered solvent exposed loops and exhibiting selective binding activity toward a disparate ligand. A chimeric ThyOx binding polypeptide having one or more altered Ig-like domain loop regions of a ThyOx family polypeptide and having selective binding activity toward a non-ThyOx ligand as well as a chimeric ThyOx carrier polypeptide comprising a at least one Ig-like domain containing scaffold derived from a ThyOx family polypeptide, and a heterologous binding polypeptide exhibiting selective binding activity toward a non-ThyOx ligand are further provided. Addnl., the invention provides nucleic acids encoding a non-Ig or ThyOx binding polypeptide of the invention. The non-Ig binding polypeptide is a ThyOx family polypeptide such as Thy-1, Ox2, CD7, Ox2-like protein or Ox2 homolog. The Ig-like domain is selected from T cell receptor, CD8, CD4, CD2, class I MHC, class II MHC, CD1, cytokine receptor, G-CSF receptor, GM-CSF receptor, hormone receptor, growth hormone receptor, erythropoietin receptor, interferon receptor, interferon  $\gamma$  receptor, prolactin receptor, NCAM, VACM, ICAM, N-cadherin, E-cadherin, fibronectin, tenascin, and I-set-containing domain polypeptides, or a functional fragment. Such chimeric polypeptides containing anti-fibrin VH CDR1 loop, erythropoietin and glucagon-like peptide 1 were prepared for therapeutic uses.

IC ICM C07K016-44  
 INCL 530387300  
 CC 15-3 (Immunochemistry)  
 Section cross-reference(s): 1, 3  
 IT **DNA sequences**  
 Drug design  
 Human  
 Immunotherapy  
 Molecular cloning  
 Protein sequences  
 cDNA sequences  
 (CDR-containing chimeric ThyOx polypeptides for therapeutic use)  
 IT Fusion proteins (chimeric proteins)  
**Nucleic acids**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
 (Preparation); USES (Uses)  
 (CDR-containing chimeric ThyOx polypeptides for therapeutic use)  
 IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (chimeric, fragment; CDR-containing chimeric  
 ThyOx polypeptides for therapeutic use)  
 IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (fragments; CDR-containing chimeric ThyOx polypeptides  
 for therapeutic use)  
 IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (heavy chain; CDR-containing chimeric  
 ThyOx polypeptides for therapeutic use)  
 IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (humanized, fragment; CDR-containing chimeric  
 ThyOx polypeptides for therapeutic use)  
 IT 819097-85-3P 819097-86-4P 819097-88-6P, **DNA** (synthetic  
 plasmid **vector** pEgeaM3) 819097-89-7P, **DNA** (synthetic  
 plasmid **vector** pEgeaQ6)  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
 (Preparation); USES (Uses)  
 (nucleotide sequence; CDR-containing chimeric ThyOx polypeptides for  
 therapeutic use)

L93 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:934146 CAPLUS  
 DOCUMENT NUMBER: 141:409777  
 TITLE: Aminophospholipid-specific antibodies,  
 immunoconjugates and duramycin-based compounds for  
 treating and **diagnosing cancer** and  
 viral infections  
 INVENTOR(S): Thorpe, Philip E.; Ran, Sophia  
 PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 181 pp., Cont.-in-part of U.S. Ser. No. 621,269.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 17  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004219155	A1	20041104	US 2003-642099	20030815
US 2004170620	A1	20040902	US 2003-621269	20030715
PRIORITY APPLN. INFO.:			US 2002-396263P	P 20020715
			US 2003-621269	A2 20030715

ED Entered STN: 06 Nov 2004

AB The invention provides new methods and compns. for safe and effective tumor vascular targeting, anti-angiogenesis and tumor destruction, which methods and compns. are also surprisingly effective in treating viral infections and related diseases. The invention is based, in part, on discoveries concerning the expression and role of anionic phospholipids in tumor vasculature and the involvement of aminophospholipids and anionic phospholipids in viral entry, replication and spread. The present invention further provides particularly advantageous antibodies and immunoconjugates that bind to aminophospholipids and anionic phospholipids, and a new class of peptide-based derivs., such as duramycin-based compns., that bind to phosphatidylethanolamine.

IC ICM A61K039-395  
 ICS C07K016-46

INCL 424178100; 530391100

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 63

ST antibody aminophospholipid duramycin immunoconjugate **diagnosis cancer** viral infection; anticancer antiviral antibody  
 aminophospholipid duramycin immunoconjugate

IT DNA sequences

**Protein sequences**

(3G4 antibody-specifying; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT Ricins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (A, deglycosylated; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT CD antigens

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (CD106; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ELR- CXC; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (IgG; aminophospholipid-specific antibodies, immunoconjugates and



- duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Viscum album coloratum  
(Korean mistletoe, extract; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Leukemia inhibitory factor  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(LIF; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Mig (monokine induced by interferon- $\gamma$ ); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(RIP (ribosome-inactivating protein); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Chemokines  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(SDF-1 (stromal-derived factor-1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Enzymes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Serratia protease, antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(TRAIL (tumor necrosis factor-related apoptosis-inducing ligand); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Annexins  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(V; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cell adhesion molecules  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(VCAM-1 (vascular cell adhesion mol. 1); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Phospholipids, biological studies  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(acidic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(aerosols; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

- IT **Diagnosis**  
(agents, antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Phospholipids, biological studies  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(amine-containing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Alkylating agents, biological  
Angiogenesis inhibitors  
Antibiotics  
Antitumor agents  
Antiviral agents  
Chemotherapy  
Coagulants  
Cytotoxic agents  
Human  
Imaging agents  
Immunotherapy  
Linking agents  
Molecular cloning  
Neoplasm  
Radiotherapy  
Tumor **markers**  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cardiolipins  
Nucleosides, biological studies  
Phosphatidic acids  
Phosphatidylethanolamines, biological studies  
Phosphatidylglycerols  
Phosphatidylinositols  
Phosphatidylserines  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Fusion proteins (chimeric proteins)  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Radionuclides, biological studies  
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

- IT Anthracyclines
- Cytokines
- Glucocorticoids
- Interferons
- Interleukin 12
- Osteonectin
- Retinoids
- Steroids, biological studies
- Taxanes
- Thrombospondins
- Tumor necrosis factors
- RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Blood serum  
(anal.; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT CD20 (antigen)  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(anti-; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drugs  
(antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Cytotoxic agents  
(antimetabolites; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(bisppecific; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
(**cancer**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Drug delivery systems  
(carriers; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Annexins  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing**

- cancer and viral infections)**
- IT Imaging  
X-ray  
(**diagnostic**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Toxins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(diphtheria; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Blood vessel  
(endothelium, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Immunoassay  
(enzyme-linked immunosorbent assay; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Toxins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(exotoxins, Pseudomonas; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(fragments, Fv, Fab', Fab, diabody, linear antibody or F(ab'), CDR, univalent fragment; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (**Diagnostic use**); PRP (Properties); THU (**Therapeutic use**); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**humanized**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Drug delivery systems  
(immunoconjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT **Diagnosis**  
(immunodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Drug delivery systems  
(immunotoxins; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer and viral infections)**
- IT Cytomegalovirus

(infection; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Tubulins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Drug delivery systems

(injections, i.v.; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (interferon  $\gamma$ -inducible protein-10, IP-10; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT NMR (nuclear magnetic resonance)

(isotopes; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (**light chain**; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal, 3G4, (ATCC PTA 4545); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoclonal; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Fibronectins

## Laminins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptides; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Toxins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (plant-, fungus- or bacteria-derived; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Drug delivery systems

(prodrugs; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

## IT Cytokines

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (proinflammatory; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Bond  
(releasable; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT **Diagnosis**  
(serodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(single chain, scFv; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Neoplasm  
(solid; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Apoptosis  
(tumor cell, inducing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Endothelium  
(vascular, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Alkaloids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(vinca; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Infection  
(viral; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\alpha$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Transforming growth factors  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ 1-; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT Interferons  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\gamma$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

- IT Enzymes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(D-Alanylcarboxypeptidase, antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 92769-12-5, Proliferin (protein)  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(-related protein; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9002-62-4, Prolactin, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(16 kDa, fragment; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 790789-26-3DP, humanized or chimeric derivs. and conjugates  
790789-28-5DP, humanized or chimeric derivs. and conjugates  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 9035-58-9, Blood-coagulation factor III  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 54-42-2, Idoxuridine 70-00-8, Trifluorothymidine 127-07-1, Hydroxyurea 768-94-5, Amantadine 1391-36-2D, Duramycin, conjugates 2056-98-6 3056-17-5, Stavudine 5536-17-4, Vidarabine 7481-89-2, Zalcitabine 13392-28-4, Rimantadine 30516-87-1, AZT 36791-04-5, Ribavirin 39809-25-1, Penciclovir 59277-89-3, Acyclovir 69655-05-6, Didanosine 77181-69-2, Sorivudine 82410-32-0, Gancyclovir 113852-37-2, Cidofovir 114977-28-5, Docetaxel 120082-86-2 127779-20-8, Saquinavir 129556-87-2, Adefovir diphosphate 129618-40-2, Nevirapine 134678-17-4, Lamivudine 136470-78-5, Abacavir 136817-59-9, Delavirdine 139110-80-8, Zanamivir 142340-99-6, Adefovir dipivoxil 142937-65-3 143188-53-8, Lamivudine triphosphate 145819-92-7, Emtricitabine triphosphate 150378-17-9, Indinavir 154598-52-4, Efavirenz 155213-67-5, Ritonavir 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 196618-13-0, Oseltamivir 717854-15-4, Multinucleoside resistance A 717854-16-5, Multinucleoside resistance B  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)
- IT 50-02-2, Dexamethasone 50-18-0, Cyclophosphamide 50-35-1, Thalidomide 50-76-0, Actinomycin D 51-21-8, Fluorouracil 53-06-5, Cortisone 53-79-2, Puromycin 55-86-7, Nitrogen mustard 57-22-7, Vincristine 59-05-2, Methotrexate 64-86-8, Colchicine 66-22-8, Uracil, biological studies 66-81-9, Cycloheximide 67-99-2, Aspergillin 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3, Melphalan 305-03-3, Chlorambucil 362-07-2 477-30-5, Colcemid 865-21-4, Vinblastine 1404-00-8, Mitomycin 1406-72-0, Restrictocin 2998-57-4, Estramustine 4375-07-9, Epipodophyllotoxin 7689-03-4, Camptothecin 9001-67-6D, Neuraminidase, antibody conjugates 9001-78-9D, Alkaline phosphatase,

antibody conjugates 9001-99-4, Ribonuclease 9004-08-4D, Cathepsin, antibody conjugates 9014-01-1D, Subtilisin, antibody conjugates 9014-06-6D, Penicillin amidase, antibody conjugates 9015-68-3, L-Asparaginase 9016-17-5D, Arylsulfatase, antibody conjugates 9025-05-2D, Cytosine deaminase, antibody conjugates 9031-11-2D,  $\beta$ -Galactosidase, antibody conjugates 9031-98-5D, Carboxypeptidase, antibody conjugates 9073-60-3D, antibody conjugates 9073-78-3D, Thermolysin, antibody conjugates 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 15663-27-1, Cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin 21679-14-1, Fludarabine 23110-15-8, Fumagillin 23214-92-8, Doxorubicin 25316-40-9, Adriamycin 29767-20-2, Teniposide 31441-78-8, Mercaptopurine 33069-62-4, Paclitaxel 33419-42-0, Etoposide 37270-94-3, Platelet factor 4 56420-45-2, Epirubicin 62996-74-1, Staurosporine 65271-80-9, Mitoxantrone 65646-68-6, Fenretinide 70641-51-9, Edelfosine 74578-38-4, UFT 75037-46-6, Gelonin 82855-09-2, Combretastatin 83150-76-9, Octreotide 84088-42-6, Linomide 86090-08-6, Angiostatin 86243-64-3,  $\alpha$ Sarcin 95058-81-4, Gemcitabine 97682-44-5, Irinotecan 98319-26-7, Finasteride 112953-11-4, 7-Hydroxystaurosporine 123948-87-8, Topotecan 129298-91-5, AGM-1470 146426-40-6, Flavopiridol 156511-34-1, L 739749 160141-09-3, L-744832 187888-07-9, Endostatin 188417-67-6, CM 101 (polysaccharide) 220127-57-1, STI571

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 9034-40-6, LHRH

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(antagonists; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 80449-01-0, Topoisomerase 105913-11-9, Plasminogen activator 124861-55-8, TIMP 2 140208-23-7 140208-24-8, TIMP 1 142243-03-6 145809-21-8, TIMP 3 186207-03-4, TIMP 4

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 9068-38-6, Reverse transcriptase 144114-21-6, HIV protease

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(inhibitors; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 790789-25-2DP, humanized or chimeric derivs. and conjugates

790789-27-4DP, humanized or chimeric derivs. and conjugates

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 790794-10-4

RL: PRP (Properties)  
(unclaimed nucleotide sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 790794-11-5

RL: PRP (Properties)  
(unclaimed **protein sequence**; aminophospholipid-



specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

IT 650591-60-9 716329-62-3 790794-12-6

RL: PRP (Properties)

(unclaimed sequence; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and **diagnosing cancer** and viral infections)

L93 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:331679 CAPLUS

DOCUMENT NUMBER: 140:355832

TITLE: MAGE peptides binding to HLA class II molecules, T cell receptors that bind complexes of the MAGE/HLA peptides, and diagnostic and therapeutic uses

INVENTOR(S): Zhang, Yi; Chaux, Pascal; Boon-Falleur, Thierry; Van Der Bruggen, Pierre

PATENT ASSIGNEE(S): Belg.

SOURCE: U.S. Pat. Appl. Publ., 59 pp., Cont.-in-part of U.S. Ser. No. 860,840.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004077045	A1	20040422	US 2003-444683	20030523
US 2003049723	A1	20030313	US 2001-860840	20010518

PRIORITY APPLN. INFO.: US 2001-860840 A2 20010518

ED Entered STN: 23 Apr 2004

AB The invention describes HLA class II binding peptides encoded by the MAGE tumor associated genes, such as MAGE-A3 gene, that are epitopes presented by HLA-DR1, as well as nucleic acids encoding such peptides and antibodies relating thereto. The peptides stimulate the activity and proliferation of CD4+ T lymphocytes. In addition, T cell receptors that bind complexes of the MAGE HLA class II peptides and HLA class II mols. have been isolated and sequenced. The invention provides isolated MAGE-A3 peptides which bind HLA class II mols., and functional variants of such peptides, comprising one or more amino acid addns., substitutions or deletions to the MAGE-A3 peptide sequence. Methods and products also are provided for diagnosing and treating conditions characterized by expression of MAGE genes.

IC ICM C07K014-74

ICS C07H021-04; C12P021-02; C12N005-06

INCL 435069100; 435320100; 435325000; 530350000; 536023500

CC 15-2 (Immunochimistry)

Section cross-reference(s): 3, 63

ST MAGE epitope HLA presented TCR binding antitumor antibody; **cancer diagnosis** MAGE peptide HLA complex; sequence MAGE peptide HLA T cell receptor

IT TCR (T cell receptors)

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(CDR3 region; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

IT Antigen-presenting cell

Antitumor agents  
 CD4-positive T cell  
 Drug delivery systems  
 Drug screening  
 Human  
 Immunotherapy  
 Linking agents  
 Molecular cloning  
 Plasmid vectors  
 Retroviral vectors  
 Tumor **markers**  
 Vaccines  
 Viral vectors

(MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT Diagnosis**

(**cancer**; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); DGN (**Diagnostic use**); THU (**Therapeutic use**); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**

(**chimeric**; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**  
 (fragments, Fab, F(ab)<sub>2</sub>, Fv, CDR3; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); DGN (**Diagnostic use**); THU (**Therapeutic use**); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**

(**humanized**; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT TCR (T cell receptors)**

RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**

( $\alpha$  subunit, CDR3 region; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT TCR (T cell receptors)**

RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**

( $\beta$  subunit, CDR3 region; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

**IT 681454-83-1 681454-85-3 681454-87-5 681454-89-7 681454-91-1**

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); **USES (Uses)**

(T cell receptor comprising CDR3; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

peptides, and diagnostic and therapeutic uses)

IT 681454-81-9

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(T cell receptor fragment, comprising CDR3; MAGE peptides binding to HLA class II mols., T cell receptors that bind complexes of MAGE/HLA peptides, and diagnostic and therapeutic uses)

L93 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:892820 CAPLUS

DOCUMENT NUMBER: 139:380015

TITLE: CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma

INVENTOR(S): Popplewell, Andrew George; Tickle, Simon Peter; Ladyman, Heather Margaret

PATENT ASSIGNEE(S): Celltech R & D Limited, UK

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003093320	A2	20031113	WO 2003-GB1934	20030502
WO 2003093320	A3	20040205		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2484420	AA	20031113	CA 2003-2484420	20030502
AU 2003223007	A1	20031117	AU 2003-223007	20030502
US 2003235869	A1	20031225	US 2003-428408	20030502
EP 1504035	A2	20050209	EP 2003-718974	20030502
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
CN 1662558	A	20050831	CN 2003-815043	20030502
JP 2006506955	T2	20060302	JP 2004-501459	20030502
NO 2004004742	A	20041222	NO 2004-4742	20041102
PRIORITY APPLN. INFO.:			GB 2002-10121	A 20020502
			WO 2003-GB1934	W 20030502

ED Entered STN: 14 Nov 2003

AB There is disclosed antibody mols. containing at least one CDR derived from a mouse monoclonal antibody having specificity for human CD22. There is also disclosed a CDR grafted antibody wherein at least one of the CDRs is a modified CDR. Further disclosed are DNA sequences encoding the chains of the antibody mols., vectors, transformed host cells and uses of the antibody mols. in the treatment of diseases mediated by cells expressing CD22.

IC ICM C07K016-28

ICS C12N015-13; C12N015-85; C12N005-10; A61K039-395; A61K031-7088;

A61P035-00

CC 15-3 (Immunochemistry)  
Section cross-reference(s): 3, 9, 63

IT Affinity  
Antitumor agents  
DNA sequences  
Gene therapy  
Genetic **vectors**  
Human  
Immunotherapy  
Lymphoma  
Molecular cloning  
Mus  
Protein sequences  
Test kits  
(CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma)

IT **Diagnosis**  
(**cancer**; CDR-grafted mouse monoclonal anti-human CD22 antibodies for **diagnosis** and treatment of lymphoma or non-Hodgkin's lymphoma)

IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**heavy chain**; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma)

IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
(**humanized**; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma)

IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; CDR-grafted mouse monoclonal anti-human CD22 antibodies for diagnosis and treatment of lymphoma or non-Hodgkin's lymphoma)

L93 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:242439 CAPLUS

DOCUMENT NUMBER: 138:270296

TITLE: Recombinant immunoglobulin having heavy and **light chain** framework scaffold and donor antibody CDRs for diagnostic and therapeutic assay

INVENTOR(S): Zhang, Mei Yun; Schillberg, Stefan; Zimmermann, Sabine; Di Fiore, Stefano; Emans, Neil; Fischer, Rainer

PATENT ASSIGNEE(S): Fraunhofer Institut Molekularbiologie und Angewandte Oekologie, Germany

SOURCE: PCT Int. Appl., 198 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003025124	A2	20030327	WO 2002-US29003	20020913
WO 2003025124	A3	20030918		
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,				
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,				
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1434800	A2	20040707	EP 2002-759649	20020913
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005037420	A1	20050217	US 2004-489328	20040827
PRIORITY APPLN. INFO.:			US 2001-318904P	P 20010914
			WO 2002-US29003	W 20020913

ED Entered STN: 28 Mar 2003

AB This invention relates to Ig mols. comprising light chain (VL) chimeric variable domains, heavy chain (VH) chimeric variable domains, e.g., scFv antibodies that are expressed at high levels within a host cell, preferably within particular cellular compartments such as, e.g., cytosol or apoplast. The VL, VH and scFv antibody mols. comprise framework scaffolds of particularly preferred framework regions. This invention also relates to nucleic acid mols. encoding the Ig mols. of this invention, vectors expressing the Ig mols., hosts transformed with the nucleic acid mols. and vectors, and methods of using the Ig mols. Also described are Ig libraries as well as host cells, including transgenic plants, expressing the VL, VH or scFv antibody mols. of this invention. Thus, recombinant NSM protein was prepared to select antibody clones for mol. cloning of scFv's.

IC ICM C12N

CC 15-3 (Immunochimistry)

Section cross-reference(s): 3, 9, 11, 17

IT Wound

(-inducible promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Glutelins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (1; promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Promoter (genetic element)

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (35S; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Cauliflower mosaic virus

(35s promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);  
BSU (Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PREP (Preparation)  
(58,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BSU (Biological study,  
unclassified); ANST (Analytical study); BIOL (Biological study)  
(58,000-mol.-weight, soluble; plant cell-produced recombinant scFv

antibodies

comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);  
BSU (Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PREP (Preparation)  
(59,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BSU (Biological study,  
unclassified); ANST (Analytical study); BIOL (Biological study)  
(59,000-mol.-weight, soluble; plant cell-produced recombinant scFv

antibodies

comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);  
BSU (Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PREP (Preparation)  
(60,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BSU (Biological study,  
unclassified); ANST (Analytical study); BIOL (Biological study)  
(60,000-mol.-weight, soluble; plant cell-produced recombinant scFv

antibodies

comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);  
BSU (Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PREP (Preparation)  
(6000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BSU (Biological study,  
unclassified); ANST (Analytical study); BIOL (Biological study)  
(6000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold  
with donor CDRs for diagnostic and therapeutic use)

IT Proteins

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);  
BSU (Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PREP (Preparation)  
(62,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies  
comprising heavy and **light chain** framework scaffold

with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (62,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (63,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (63,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (64,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (64,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (65,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (65,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (66,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)

(66,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (67,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (67,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (68,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (68,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (70,000-mol.-weight, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Proteins  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (70,000-mol.-weight, soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Animal cell line  
 (CHO; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Animal cell line  
 (COS; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Protein motifs  
 (Ig. heavy and **light chain** CDRs; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Protein motifs



- (Ig. heavy and **light chain** framework; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Fusion proteins (chimeric proteins)  
 Proteins  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Promoter (genetic element)  
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (SbPRP1; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Diagnosis  
 (agents; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Plant tissue  
 (apoplast; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Peptides, biological studies  
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (cellular-targeting; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Cytoplasm  
 (cytoplast; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Cytoplasm  
 (cytosol; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Immunoassay  
 (enzyme-linked immunosorbent assay, indirect or capture phage; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Immunoassay  
 (enzyme-linked immunosorbent assay; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (fragments, Fv and scFv; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT **Antibodies and Immunoglobulins**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,

unclassified); **DGN (Diagnostic use)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**

(fusion products, diabodies, triabodies and tetrabodies; plant cell-produced **recombinant** scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Promoter (genetic element)

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(heat shock-inducible; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**

(**heavy chain**; plant cell-produced **recombinant** scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Diagnosis

(immunodiagnosis; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Auxins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inducible promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**

(**light chain**; plant cell-produced **recombinant** scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Animal cell

(mammalian; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Embryophyta

(ornamental plant; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Bioassay

(phage display; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT Algae

Amaranthus

Avena sativa

Aves

Camelidae

Canola

**DNA sequences**

Drugs

Escherichia coli  
 Eubacteria  
 Eukaryota  
 Fish  
 Fungi  
 Genetic **vectors**  
 Genomic library  
 Glycine max  
 Gossypium hirsutum  
 Helianthus annuus  
 Hordeum vulgare  
 Human  
 Insecta  
 Liliopsida  
 Linking agents  
 Lycopersicon esculentum  
 Magnoliopsida  
 Mammalia  
 Medicago sativa  
 Molecular cloning  
 Mycoplasma  
 Nematoda  
 Nicotiana tabacum  
 Oryza sativa  
 Pathogen  
 Phage display library  
 Plant cell  
 Prokaryota  
 Protein microarray technology  
 Protein sequences  
 Rodentia  
 Saccharum officinarum  
 Solanum tuberosum  
 Sorghum bicolor  
 Transformation, genetic  
 Triticum aestivum  
 Virus  
 Yeast  
 Zea mays  
 (plant cell-produced recombinant scFv antibodies comprising heavy and  
**light chain** framework scaffold with donor CDRs for  
 diagnostic and therapeutic use)  
 IT **Antibodies and Immunoglobulins**  
**Antibodies and Immunoglobulins**  
**Nucleic acids**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study,  
 unclassified); DGN (Diagnostic use); PRP (Properties); **THU**  
 (Therapeutic use); BIOL (Biological study); **PREP**  
 (Preparation); **USES (Uses)**  
 (plant cell-produced recombinant scFv antibodies comprising  
 heavy and **light chain** framework scaffold with donor  
**CDRs** for diagnostic and therapeutic use)  
 IT **Antigens**  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (plant cell-produced recombinant scFv antibodies comprising heavy and  
**light chain** framework scaffold with donor CDRs for  
 diagnostic and therapeutic use)  
 IT **Promoter (genetic element)**  
 RL: BSU (Biological study, unclassified); BUU (Biological use,  
 unclassified); BIOL (Biological study); **USES (Uses)**

- (plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Organelle  
(protein body, targeting peptide; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Proteins  
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
(recombinant, NSM; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Proteins  
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
(soluble; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Leaf  
Plant tissue  
Root  
(specific promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Endoplasmic reticulum  
(targeting peptide; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Embryophyta  
Plants  
(transgenic; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Imaging  
(tumor; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Organelle  
(vacuole, targeting peptide; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Promoter (genetic element)  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(wounding-inducible; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT Tubulins  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
( $\alpha$ -, promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)
- IT 503333-47-9P 503334-70-1P 503334-73-4P 503334-74-5P 503334-75-6P  
503334-76-7P 503334-77-8P 503334-78-9P 503334-79-0P 503334-80-3P  
503334-81-4P 503334-82-5P 503334-83-6P 503334-84-7P 503334-85-8P  
503334-86-9P 503334-87-0P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT 503334-71-2P 503334-72-3P 503334-88-1P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(nucleotide sequence; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT 178327-47-4P 503309-56-6P 503309-59-9P 503309-61-3P 503309-62-4P  
503309-64-6P 503309-66-8P 503333-48-0P 503333-49-1P 503333-50-4P  
503333-51-5P 503333-52-6P 503333-53-7P 503333-54-8P 503333-55-9P  
503333-56-0P, 35: PN: WO03025124 SEQID: 35 claimed **DNA**  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT 60267-61-0, Ubiquitin  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(promoter; plant cell-produced recombinant scFv antibodies comprising heavy and **light chain** framework scaffold with donor CDRs for diagnostic and therapeutic use)

IT 503337-00-6 503337-01-7 503337-02-8 503337-03-9 503337-04-0  
503337-05-1 503337-06-2 503337-07-3 503337-08-4 503337-09-5  
503337-10-8 503337-11-9 503337-12-0 503337-13-1 503337-14-2  
503337-15-3 503337-16-4 503337-17-5 503337-18-6 503337-19-7  
503337-20-0 503337-21-1 503337-22-2 503337-23-3 503337-24-4  
503337-25-5 503337-26-6 503337-27-7 503337-28-8 503337-29-9  
503337-30-2 503337-31-3 503337-32-4 503337-33-5 503337-34-6  
503337-35-7 503337-36-8 503337-37-9 503337-38-0 503337-39-1  
503337-40-4 503337-41-5 503337-42-6 503337-43-7 503337-44-8  
503337-45-9 503337-46-0 503337-47-1 503337-48-2  
RL: PRP (Properties)

(unclaimed nucleotide sequence; recombinant Ig having heavy and **light chain** framework scaffold and donor antibody CDRs for diagnostic and therapeutic assay)

IT 503337-49-3  
RL: PRP (Properties)  
(unclaimed protein sequence; recombinant Ig having heavy and **light chain** framework scaffold and donor antibody CDRs for diagnostic and therapeutic assay)

L93 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:154547 CAPLUS

DOCUMENT NUMBER: 138:203682

TITLE: Humanized mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like

INVENTOR(S): Jia, Audrey Yunhua; Tsurushita, Naoya; Vasquez, Maximiliano J.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 82 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016466	A2	20030227	WO 2002-US21322	20020814
WO 2003016466	A3	20031023		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2451998	AA	20030227	CA 2002-2451998	20020814
EP 1432444	A2	20040630	EP 2002-759113	20020814
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
JP 2005503789	T2	20050210	JP 2003-521775	20020814
US 2004192898	A1	20040930	US 2004-487322	20040217
PRIORITY APPLN. INFO.:			US 2001-313224P	P 20010817
			WO 2002-US21322	W 20020814

ED Entered STN: 28 Feb 2003

AB This invention provides variant 266 antibodies that are engineered to lack an N-glycosylation site within the CDR2 of the heavy chain, pharmaceutical compns. thereof, and polynucleotide sequences, vectors, and transformed cells useful to express the variant antibodies. The variants sequester soluble A $\beta$  peptide from humanbiol. fluids and specifically bind an epitope contained within position 13-28 of the amyloid beta peptide A $\beta$  with significantly greater affinity than either mouse antibody 266 or humanized 266 antibodies retaining N-glycosylation sites. The variant antibodies are useful for treatment or prevention of conditions and diseases associated with Asz, including Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like.

IC ICM C12N

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgG1; humanized mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fragments; humanized mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(fusion products; **humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Protein motifs**

(glycosylation site, N-; **CDR2**; **humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(**heavy chain**; **humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Alzheimer's disease**

Body fluid

**DNA sequences**

Down's syndrome

Drug delivery systems

**Genetic vectors**

HeLa cell

Human

Immunotherapy

Molecular cloning

Mus

Protein sequences

**cDNA sequences**

(**humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(**humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Nucleic acids**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(**humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); **DGN (Diagnostic use)**; PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**

(**humanized**; **humanized** mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; BSU (Biological study,

unclassified); **DGN** (**Diagnostic use**); **PRP** (**Properties**); **THU** (**Therapeutic use**); **BIOL** (**Biological study**); **PREP** (**Preparation**); **USES** (**Uses**)  
 (light chain; humanized mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

**IT Antibodies and Immunoglobulins**

**RL: BPN** (**Biosynthetic preparation**); **BSU** (**Biological study**, unclassified); **DGN** (**Diagnostic use**); **PRP** (**Properties**); **THU** (**Therapeutic use**); **BIOL** (**Biological study**); **PREP** (**Preparation**); **USES** (**Uses**)  
 (monoclonal; humanized mouse anti- $\beta$  amyloid antibodies for treating Alzheimer's disease, Down's syndrome, cerebral amyloid angiopathy, mild cognitive impairment, and the like)

L93 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:396486 CAPLUS

DOCUMENT NUMBER: 138:400408

TITLE: Humanized antibodies LB-00503 and LB-00506 specific for human 4-1BB and pharmaceutical compositions comprising said humanized antibodies

INVENTOR(S): Hong, Hyo Jeong; Park, Sung Sup; Kang, Young Jun; Kang, Chang-Yuil; Yoon, Sung Kwan; Park, Youngwoo; Yoon, Hyesung; Jang, Hyunsook; Rha, Geun Bae; Yoo, Jin-San; Jeong, Jong Keun; Shim, Dong Sup; Park, Mijeong; Kim, Hwadong; Park, Jung-gyu; Yang, Jae-young  
 S. Korea

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S. 6,458,934.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003096976	A1	20030522	US 2002-233996	20020904
KR 2000034847	A	20000626	KR 1999-16750	19990511
US 6458934	B1	20021001	US 1999-438954	19991112
PRIORITY APPLN. INFO.:			KR 1998-49177	A 19981117
			KR 1999-16750	A 19990511
			US 1999-438954	A2 19991112
			KR 1998-19177	A 19981117

ED Entered STN: 23 May 2003

AB The present invention relates to humanized monoclonal antibodies LB-00503 and LB-00506, which are specific for human 4-1BB mols., have high binding affinities and can bind efficiently with activated T cells expressing the 4-1BB mol., as well as pharmaceutical compns. Particularly, the present invention provides said humanized antibody LB-00503, which is modified from the humanized antibody H24B4-2 and substitutes the 61st amino acid, serine by asparagine in the amino acid residues of 59th61st and said humanized antibody LB-00506, which enhances the antibody binding affinity of said humanized antibody LB-00503 in which 2 amino acid residues of the right border in the antibody binding site **CDR2** of the heavy chain variable region are substituted from glutamine→glycine (Q→G) to lysine→serine (K→S).

IC ICM A61K039-395

ICS C12N005-06; C07K016-44

INCL 530388150; 424141100; 435328000; 435320100



- CC 15-3 (Immunochemistry)  
Section cross-reference(s): 3, 9, 63
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(fragments; **humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(fusion products; **humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(**heavy chain**; **humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT Animal cell line  
Autoimmune disease  
CD4-positive T cell  
CD8-positive T cell  
**DNA sequences**  
Dissociation constant  
Drug delivery systems  
**Genetic vectors**  
Human  
Immunosuppressants  
Molecular cloning  
Protein sequences  
Rheumatoid arthritis  
Transplant and Transplantation  
Transplant rejection  
(**humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(**humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(**humanized**; **humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical compns. comprising said **humanized antibodies**)
- IT **Antibodies and Immunoglobulins**  
RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
(**light chain**; **humanized antibodies LB-00503 and LB-00506** specific for human 4-1BB and pharmaceutical

comps. comprising said **humanized** antibodies)  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
 (monoclonal; **humanized** antibodies LB-00503 and LB-00506 specific for human 4-1BB and pharmaceutical comps. comprising said **humanized** antibodies)

L93 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:241908 CAPLUS

DOCUMENT NUMBER: 138:270278

TITLE: **Vectors** and site-specific recombination for generating single-chain antibodies to intracellular antigens

INVENTOR(S): Li, Shengfeng

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003059888	A1	20030327	US 2002-226950	20020822
PRIORITY APPLN. INFO.:			US 2001-314478P	P 20010822

ED Entered STN: 28 Mar 2003

AB The present invention provides vectors that encode single-chain antigen-binding units in both prokaryotic and eukaryotic cells. The vectors are particularly useful for generating a diverse repertoire of single-chain antibodies to facilitate an in vivo screening for binding to a desired antigen inside a cell. Diversification of the antibody repertoire is afforded by site-specific recombination and Ig chain shuffling between vectors within the host. Cognate antigen recognition and screening utilizes the two-hybrid methodol.

IC ICM C12P021-02

ICS C12N001-21; C12N015-74; C12N015-85; C12N005-06

INCL 435069100; 435326000; 435455000; 435472000; 435252300; 435320100

CC 15-1 (Immunochemistry)

Section cross-reference(s): 3

IT Enzymes, biological studies

RL: **BUU (Biological use, unclassified)**; **BIOL (Biological study)**; **USES (Uses)**

(**DNA-recombining, cre**; for shuffling of Ig variable region fragments and generation of single-chain antibody repertoire)

IT Enzymes, biological studies

RL: **BUU (Biological use, unclassified)**; **BIOL (Biological study)**; **USES (Uses)**

(**DNA-recombining, gene FLP**; for shuffling of Ig variable region fragments and generation of single-chain antibody repertoire)

IT Transcription factors

RL: **BUU (Biological use, unclassified)**; **BIOL (Biological study)**; **USES (Uses)**

(**GAL4, DNA-binding domain fusion products with intracellular antigens**; in two-hybrid screening of single-chain antibody library)

IT **Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BIOL (Biological study)**; **PREP (Preparation)**

(**heavy chain**; generation of single-chain antibody repertoire by site-specific **recombination** in **vectors** for variable region gene fragments for)

IT PCR (polymerase chain reaction)  
(in generation of single-chain antibody **CDR3** region diversity in relation to recognition of cognate intracellular antigen)

IT Transcription factors  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(lexA, **DNA-binding domain fusion products** with intracellular antigens; in two-hybrid screening of single-chain antibody library)

IT **Antibodies and Immunoglobulins**  
RL: BPN (**Biosynthetic preparation**); BIOL (Biological study); **PREP (Preparation)**  
(**light chain**; generation of single-chain antibody repertoire by site-specific **recombination** in **vectors** for variable region gene fragments for)

IT **cDNA library**  
(of **vectors** expressing single-chain antibodies to intracellular antigens)

IT Genetic element  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(origin of replication; of **vectors** expressing single-chain antibodies to intracellular antigens)

L93 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:927553 CAPLUS

DOCUMENT NUMBER: 138:13510

TITLE: CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12

INVENTOR(S): Peritt, David; Carton, Jill M.

PATENT ASSIGNEE(S): Centocor, Inc., USA

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002097048	A2	20021205	WO 2002-US16876	20020528
WO 2002097048	A3	20030904		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003157105	A1	20030821	US 2002-156255	20020528
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PRIORITY APPLN. INFO.:	US 2001-294503P	P	20010530
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ED Entered STN: 06 Dec 2002

AB The present invention relates to at least one novel anti-p40 or human IL-12 Ig-derived protein, including isolated nucleic acids that encode at least one anti-p40 Ig derived protein, IL-12, vectors, host cells,

transgenic animals or plants, and methods of making and using thereof, including therapeutic compns., methods and devices. The humanized anti-p40 antibodies and fragments are useful for treating IL-12-mediated diseases.

IC ICM C12N  
 CC 15-3 (Immunochemistry)  
 Section cross-reference(s): 1, 2, 3, 63  
 IT Adrenoceptor agonists  
 Alkylating agents, biological  
 Analgesics  
 Anesthetics  
 Animal cell  
 Animal tissue  
 Animals  
 Antiasthmatics  
 Anticoagulants  
 Antidepressants  
 Antidiabetic agents  
 Antidiarrheals  
 Antiemetics  
 Antimicrobial agents  
 Antipsychotics  
 Antirheumatic agents  
 Antitussives  
 Antiulcer agents  
 Anxiolytics  
 Chemical compounds  
 Drugs  
 Epitopes  
 Eukaryota  
 Genetic **vectors**  
 HeLa cell  
 Hormone replacement therapy  
 Human  
 Hypnotics and Sedatives  
 Hypnotics and Sedatives  
 Immunosuppressants  
 Immunotherapy  
 Labels  
 Laxatives  
 Leukotriene antagonists  
 Lymphoma  
 Mammalia  
 Medical goods  
 Molecular cloning  
 Multiple myeloma  
 Mus  
 Muscle relaxants  
 Narcotics  
 Nervous system stimulants  
 Neuromuscular blocking agents  
 Nutrition, animal  
 Organ, animal  
 Oryctolagus cuniculus  
 Packaging materials  
 Primates  
 Prokaryota  
 Protein sequences  
 Radiopharmaceuticals  
 Rattus

Rodentia

Vaccines

(CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12)

IT Corticosteroids, biological studies

Cytokines

Minerals, biological studies

**Nucleic acids**

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(heavy chain, variable; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(humanized; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(light chain, variable; CDR-grafted anti-human p40 antibodies for diagnosis and treatment of conditions mediated by interleukin 12)

L93 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:716487 CAPLUS

DOCUMENT NUMBER: 137:246554

TITLE: Therapeutic antibody binding molecules against CD45 antigen isoforms

INVENTOR(S): Aversa, Gregorio; Kolbinger, Frank; Carballido Herrera, Jose M.; Aszodi, Andras; Saldanha, Jose W.; Hall, Bruce M.

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072832	A2	20020919	WO 2002-EP1420	20020211
WO 2002072832	A3	20040325		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VN, YU, ZA, ZW			
RW:	AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES,			

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

CA 2437963	AA	20020919	CA 2002-2437963	20020211
EP 1421191	A2	20040526	EP 2002-711860	20020211

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2002007151	A	20041005	BR 2002-7151	20020211
JP 2004533816	T2	20041111	JP 2002-571886	20020211
CN 1551919	A	20041201	CN 2002-804785	20020211
ZA 2003005911	A	20040628	ZA 2003-5911	20030731
NO 2003003549	A	20031010	NO 2003-3549	20030811
US 2004096901	A1	20040520	US 2004-467546	20040105

PRIORITY APPLN. INFO.: GB 2001-3389 A 20010212  
WO 2002-EP1420 W 20020211

ED Entered STN: 20 Sep 2002

AB The invention relates to chimeric or humanized antibody against CD45 antigen isoforms. The said binding mols. comprise at least one **antigen binding site**, comprising the hypervariable regions **CDR1**, **CDR2** and **CDR3** or the hypervariable regions **CDR1'**, **CDR2'** and **CDR3'**. The binding mols. of the invention inhibit primary mixed lymphocyte responses (MLR). Cells derived from cultures treated with CD45RO/RB binding mols. preferredly also have impaired proliferative responses in secondary MLR even in the absence of CD45RO/RB binding mols. in the secondary MLR. In vivo administration of CD45RO/RB binding mol. to severe combined immunodeficiency (SCID) mice undergoing xeno-GVHD following injection with human PBMC may prolong mice survival, compared to control treated mice, even though circulating human T cells may still be detected in CD45RO/RB binding mol. treated mice.

IC ICM C12N015-13  
ICS C07K016-28; C12N015-79; C12N015-10; A61K039-395; A61P037-00

CC 15-3 (Immunochemistry)  
Section cross-reference(s): 1, 13

IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(fragments, **CDR1**, **CDR2**, **CDR3**, **CDR1'**, **CDR2'** and **CDR3'**; therapeutic antibody binding mols. against CD45 antigen isoforms)

IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**humanized**; therapeutic antibody binding mols. against CD45 antigen isoforms)

IT Antibodies and Immunoglobulins  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(**light chain**; therapeutic antibody binding mols. against CD45 antigen isoforms)

IT Molecular cloning  
**Protein sequences**  
cDNA sequences  
(of antibody; therapeutic antibody binding mols. against CD45 antigen isoforms)

IT 460710-86-5P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CDR1 of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

IT 460710-89-8P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(CDR1' of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

IT 460710-87-6P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(CDR2 of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

IT 460710-90-1P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(CDR2' of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

IT 460710-88-7P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(CDR3 of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

IT 460710-91-2P  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(CDR3' of chimeric antibody; therapeutic antibody binding  
mols. against CD45 antigen isoforms)

L93 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:615858 CAPLUS

DOCUMENT NUMBER: 137:184461

TITLE: Cloning of anti-renal cell carcinoma monoclonal IgG1  
G250 VH and VL gene and its use for producing its  
recombinant antibodies as therapeutic agents

INVENTOR(S): Bolhuis, Reinier L. H.; Woehl, Thorsten; Boettger,  
Volker

PATENT ASSIGNEE(S): Willex A.-G., Germany

SOURCE: PCT Int. Appl., 18 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002063010	A2	20020815	WO 2002-EP1283	20020207
WO 2002063010	C2	20020912		
WO 2002063010	A3	20031127		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,			
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,			
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,			
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,			
	PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,			
	UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1385959 A2 20040204 EP 2002-722053 20020207

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2004219633 A1 20041104 US 2003-635908 20030807

PRIORITY APPLN. INFO.: US 2001-266853P P 20010207

US 2001-327008P P 20011005

WO 2002-EP1283 W 20020207

ED Entered STN: 16 Aug 2002

AB The invention relates to novel nucleic acid sequences which encode an antibody suitable in the field of tumor diagnostics and therapeutics. Specifically, the cDNAs coding for heavy chain and light chain variable regions (containing VH and VL complementary determining regions CDR1, CDR2, and CDR3) of anti-renal cell carcinoma monoclonal IgG1 G250 (originally isolated from hybridoma cell line G250) are disclosed. Further, a method of producing recombinant antibodies is provided, wherein the novel nucleic acid sequences are employed. Addnl., the recombinant antibody G250 (anti-idiotypic) is used to map the epitope of RCC associated polypeptide using peptide mass fingerprint anal. by MALDI mass spectroscopy. The chimeric G250 antibodies are useful in RCC therapy and diagnosis.

IC ICM C12N015-13

ICS C12N015-79; C07K016-30; A61K039-395; G01N033-574; G01N033-577; A61K047-48

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 14

IT **Protein sequences**

cDNA sequences

(G250 IgG1 VH and VL CDR regions; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)

; DGN (Diagnostic use); THU (Therapeutic use); ANST

(Analytical study); BIOL (Biological study); PREP (Preparation);

**USES (Uses)**

(anti-idiotypic, monoclonal IgG1 G250, anti-RCC, chimeric antibody G250; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

IT **Protein motifs**

(antigen-binding site, of antibody G250

VH or VL CDR1-3 region; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)

; DGN (Diagnostic use); THU (Therapeutic use); ANST

(Analytical study); BIOL (Biological study); PREP (Preparation);

**USES (Uses)**

(fragments, monoclonal IgG1 G250, anti-RCC, chimeric antibody G250; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation)

; DGN (Diagnostic use); THU (Therapeutic use); ANST

(Analytical study); BIOL (Biological study); PREP (Preparation);

**USES (Uses)**



(fusion products, anti-RCC, **chimeric** antibody G250 or its derivs.; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

## IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**light chain**, of G250 IgG1, gene for; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

IT 205869-45-0P 448933-58-2P 448933-59-3P 448933-60-6P 448933-61-7P 448933-62-8P

RL: BPN (Biosynthetic preparation); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence of antibody G250 VH or VL **CDR1-3** peptide; hybridoma cell line G250 and use for producing monoclonal antibodies as therapeutic agents for renal cell carcinoma)

L93 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:594996 CAPLUS

DOCUMENT NUMBER: 137:164675

TITLE: Focused libraries of genetic packages for display or expression of antibody peptides

INVENTOR(S): Ladner, Robert Charles

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002061071	A2	20020808	WO 2001-US50297	20011218
WO 2002061071	A3	20030912		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2432377	AA	20020808	CA 2001-2432377	20011218
US 2003119056	A1	20030626	US 2001-26925	20011218
EP 1360288	A2	20031112	EP 2001-998098	20011218
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004518432	T2	20040624	JP 2002-561628	20011218
PRIORITY APPLN. INFO.:			US 2000-256380P	P 20001218
			WO 2001-US50297	W 20011218

ED Entered STN: 09 Aug 2002

AB Focused libraries of vectors or genetic packages that display, display and express, or comprise a member of a diverse family of antibody peptides, polypeptides or proteins and collectively display, display and express, or comprise at least a portion of the focused diversity of the family. The

libraries have length and sequence diversities that mimic that found in native human antibodies and are characterized by variegation in their heavy chain and light chain complementarity determining regions (CDRs). The diversities of heavy chain and the  $\kappa$  and  $\lambda$  light chains are best constructed in sep. vectors. First, a synthetic gene is designed to embody each of the synthetic variable domains. The light chains are bounded by restriction sites for ApaLI (positioned at the very endo of the signal sequence) and AscI (positioned after the stop codon). The heavy chain is bounded by SfiI (positioned within the PelB signal sequence) and NotI (positioned in the linker between CH1 and the anchor protein). The initial genes are made with "stuffer" sequences in place of the desired CDRs. Examination of 3-dimensional models of a humanized antibody, identifies specific requirements for the side groups of the CDR1, CDR2, and CDR3 regions of the light and heavy chains. The DNA that encodes the preferred CDRs is synthesized using trinucleotide building blocks so that each desired amino acid residue at the variable positions is present in essentially equimolar or other described amts.

IC ICM C12N015-00  
 CC 3-2 (Biochemical Genetics)  
 Section cross-reference(s): 15  
 IT Genetic **vectors**  
 Human  
 Nucleic acid library  
 Peptide library  
 Phage display library  
 (focused libraries of genetic packages for display or expression of antibody peptides)  
 IT Antibodies and Immunoglobulins  
 RL: ANT (Analyte); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (**heavy chain**; focused libraries of genetic packages for display or expression of antibody peptides)  
 IT **Antibodies and Immunoglobulins**  
 RL: ANT (Analyte); BPN (**Biosynthetic preparation**); ANST (Analytical study); BIOL (Biological study); PREP (**Preparation**)  
 (**humanized**; focused libraries of genetic packages for display or expression of antibody peptides)  
 IT Antibodies and Immunoglobulins  
 RL: ANT (Analyte); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (**light chain**; focused libraries of genetic packages for display or expression of antibody peptides)  
 IT 446076-12-6, 1: PN: WO02061071 TABLE: 2 unclaimed **DNA**  
 446076-13-7 446076-14-8 446076-15-9, 4: PN: WO02061071 TABLE: 2 unclaimed **DNA** 446076-16-0, 5: PN: WO02061071 TABLE: 2 unclaimed **DNA**  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; focused libraries of genetic packages for display or expression of antibody peptides)  
 L93 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:555514 CAPLUS  
 DOCUMENT NUMBER: 137:124198  
 TITLE: Single-chain antibody to conformational epitope on fibronectin expressed within tumor-associated stroma  
 INVENTOR(S): De Kruif, Cornelis Adriaan; Logtenberg, Ton; Pennings, Marinus Theodorus Thomas; De Boer, Henriette Christine  
 PATENT ASSIGNEE(S): Crucell Holland B.V., Neth.  
 SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057290	A2	20020725	WO 2002-NL42	20020118
WO 2002057290	A3	20021121		
WO 2002057290	C1	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1224943	A1	20020724	EP 2001-200212	20010119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2434099	AA	20020725	CA 2002-2434099	20020118
EP 1355667	A2	20031029	EP 2002-710553	20020118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004523230	T2	20040805	JP 2002-557966	20020118
US 2004214247	A1	20041028	US 2004-466466	20040423
PRIORITY APPLN. INFO.:			EP 2001-200212	A 20010119
			US 2001-263028P	P 20010119
			WO 2002-NL42	W 20020118

ED Entered STN: 26 Jul 2002

AB The authors disclose the preparation and characterization of an scFv antibody reactive with human dermal microvascular endothelial cells. The antibody (FibMab) is demonstrated to bind to fibronectin; the binding is enhanced in association with gelatin or collagen. In immunohistochem. studies, the fibronectin epitope reactivity was demonstrated to be present in tumor stroma.

IC ICM C07K

CC 15-3 (Immunochemistry)

Section cross-reference(s): 8, 14

IT **Diagnosis**

**Diagnosis**

(cancer; antibodies and antibody fragments to conformational epitope of fibronectin expressed within tumor-associated stroma)

IT **Tumor markers**

(conformational epitope of fibronectin expressed within tumor-associated stroma)

IT **Antibodies and Immunoglobulins**

RL: ARG (Analytical reagent use); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study);  
**USES (Uses)**

(humanized; to conformational epitope on fibronectin expressed within tumor-associated stroma)

IT 442850-93-3

RL: PRP (Properties)

(heavy chain CDR3 of antibody to conformational epitope of fibronectin expressed within tumor-associated stroma)

IT 442850-94-4  
 RL: PRP (Properties)  
 (light chain CDR3 of antibody to conformational epitope of  
 fibronectin expressed within tumor-associated stroma)

L93 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:556133 CAPLUS

DOCUMENT NUMBER: 137:124205

TITLE: Humanized or CDR-grafted murine anti-human CD4 antigen  
 monoclonal antibodies for treating graft rejection and  
 helper T cell disorders

INVENTOR(S): Jolliffe, Linda K.; Ziyin, Robert A.; Pulito, Virginia  
 L.; Adair, John R.; Athwal, Diljeet S.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 61 pp., Cont.-in-part of U.S.  
 Ser. No. 426,334, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002099179	A1	20020725	US 1999-229200	19990113
GB 2268744	A1	19940119	GB 1993-18911	19901221
GB 2268744	B2	19940511		
GB 2268745	A1	19940119	GB 1993-18912	19901221
GB 2268745	B2	19940511		
EP 620276	A1	19941019	EP 1994-104042	19901221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 626390	A1	19941130	EP 1994-202090	19901221
EP 626390	B1	20011114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 11243955	A2	19990914	JP 1997-353861	19901221
CA 2129219	C	19981222	CA 1991-2129219	19910306
US 5859205	A	19990112	US 1994-303569	19940907
PRIORITY APPLN. INFO.:			GB 1989-28874	A 19891221
			US 1992-997471	B1 19921228
			US 1993-146677	B1 19931101
			US 1994-315303	B1 19940929
			US 1995-426334	B2 19950421
			EP 1991-901433	A3 19901221
			JP 1991-501864	A3 19901221
			CA 1991-2037607	A3 19910306
			GB 1991-17611	A3 19910815
			GB 1991-17612	A3 19910815
			US 1991-743329	B1 19910917

ED Entered STN: 26 Jul 2002

AB There are disclosed: a CDR-grafted antibody having at least one chain  
 wherein the framework regions are predominantly derived from a first  
 antibody (acceptor) and at least one CDR is derived from a second antibody  
 (donor), the CDR-grafted antibody being capable of binding to the CD4  
 antigen; processes for its production; nucleotide sequences for use in its  
 production; and compns. containing them. DNA encoding the murine monoclonal  
 antibody OKT4A heavy and light chains has been grafted onto the frameworks  
 of the human heavy chain KOL and light chain REI antibody genes. These  
 variable domains are ligated to the DNA encoding human  $\kappa$  light chain  
 and IgG4 heavy chain constant portion. The resulting CDR-grafted genes are  
 expressed in COS-1 cells.

IC ICM C12P021-08  
 INCL 530387300  
 CC 15-3 (Immunochemistry)  
 Section cross-reference(s): 3  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (IgG1; **humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (IgG4; **humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (fusion products; **humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (**heavy chain**; **humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT Animal cell line  
     **DNA sequences**  
     Drug delivery systems  
     Genetic **vectors**  
     Human  
     Mammalia  
     Molecular cloning  
     Mus  
     Protein sequences  
     Rodentia  
     Transplant rejection  
       (humanized or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT **Antibodies and Immunoglobulins**  
 Gene, animal  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (**humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)  
 IT **Antibodies and Immunoglobulins**  
 RL: **BPN (Biosynthetic preparation)**; BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**; BIOL (Biological study); **PREP (Preparation)**; **USES (Uses)**  
 (**humanized**; **humanized** or CDR-grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)

**IT Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
 (light chain; humanized or CDR  
 -grafted murine anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)

**IT Antibodies and Immunoglobulins**

RL: **BPN (Biosynthetic preparation)**; **BSU (Biological study, unclassified)**; **PRP (Properties)**; **THU (Therapeutic use)**; **BIOL (Biological study)**; **PREP (Preparation)**; **USES (Uses)**  
 (monoclonal; humanized or CDR-grafted murine  
 anti-human CD4 antigen monoclonal antibodies for treating graft rejection and helper T cell disorders)

L93 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:553064 CAPLUS

DOCUMENT NUMBER: 137:114482

TITLE: Fibronectin as a tumor marker detected by phage antibodies

PATENT ASSIGNEE(S): Crucell Holland B.V., Neth.

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1224943	A1	20020724	EP 2001-200212	20010119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2434099	AA	20020725	CA 2002-2434099	20020118
WO 2002057290	A2	20020725	WO 2002-NL42	20020118
WO 2002057290	A3	20021121		
WO 2002057290	C1	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1355667	A2	20031029	EP 2002-710553	20020118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004523230	T2	20040805	JP 2002-557966	20020118
US 2004214247	A1	20041028	US 2004-466466	20040423
PRIORITY APPLN. INFO.:			EP 2001-200212	A 20010119
			US 2001-263028P	P 20010119
			WO 2002-NL42	W 20020118

ED Entered STN: 26 Jul 2002

AB Means and method for at least partial inhibition of tumor growth are provided. Methods makes use of binding mols. capable of specifically binding to an epitope present on a subset of fibronectin proteins. By providing an individual with a binding mol. of the invention it is

possible to interfere with sites of angiogenesis or sites that seen active angiogenesis in the recent past. Through this interference blood flow is at least in part inhibited. Through this inhibition it is possible to at least in part inhibit processes dependent on active angiogenesis in said individual, such as tumor growth.

IC ICM A61K039-395  
ICS C07K016-28; A61P035-00; A61K047-48; A61K051-10; G01N033-53;  
C12N005-10; C12N015-13; C07K016-18; C12N015-62; A01K067-027;  
A01H005-00  
ICA C07K014-78  
CC 63-3 (Pharmaceuticals)  
Section cross-reference(s): 15  
ST antitumor angiogenesis inhibitor fibronectin tumor **marker**  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(58,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(58,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(59,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(59,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(60,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(60,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(6000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(6000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(62,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor  
**marker** detected by phage antibodies in relation to angiogenesis  
inhibition)  
IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)

- (62,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(63,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(63,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(64,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(64,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(65,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(65,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(66,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(66,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(67,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(67,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(68,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)



- (68,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(70,000-mol.-weight, gene E1 of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(70,000-mol.-weight, gene E2A of adenovirus; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Antibodies and Immunoglobulins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(CDR3 region; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Human adenovirus  
(E1 protein of; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Animal cell line  
(HDMEC-1; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Bacteriophage  
Human  
(antibodies; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Intestine, neoplasm  
(colon; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Fibronectins  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(epitopes of; fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Angiogenesis inhibitors  
Antitumor agents  
Aves  
Bladder, neoplasm  
Drug delivery systems  
Embryophyta  
Extracellular matrix  
Genetic **vectors**  
Head and Neck, neoplasm  
Head and Neck, neoplasm  
Lung, neoplasm  
Mammary gland, neoplasm  
Neoplasm  
Pancreas, neoplasm  
Plants  
Primates  
Prostate gland, neoplasm  
Rodentia  
Skin, neoplasm  
(fibronectin as a tumor **marker** detected by phage antibodies in relation to angiogenesis inhibition)
- IT Tumor antigens  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(fibronectin as a tumor **marker** detected by phage antibodies

in relation to angiogenesis inhibition)

IT Antibodies and Immunoglobulins  
Radionuclides, biological studies  
Toxins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fibronectin as a tumor **marker** detected by phage antibodies  
in relation to angiogenesis inhibition)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(gene E1 of adenovirus; fibronectin as a tumor **marker**  
detected by phage antibodies in relation to angiogenesis inhibition)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(gene E2A of adenovirus; fibronectin as a tumor **marker**  
detected by phage antibodies in relation to angiogenesis inhibition)

IT Neoplasm  
Neoplasm  
(head and neck; fibronectin as a tumor **marker** detected by  
phage antibodies in relation to angiogenesis inhibition)

IT Antibodies and Immunoglobulins  
RL: THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(humanized; fibronectin as a tumor **marker** detected  
by phage antibodies in relation to angiogenesis inhibition)

IT Endothelium  
(microvascular; fibronectin as a tumor **marker** detected by  
phage antibodies in relation to angiogenesis inhibition)

IT Blood vessel  
(microvessel, endothelium; fibronectin as a tumor **marker**  
detected by phage antibodies in relation to angiogenesis inhibition)

IT Epitopes  
(of fibronectin; fibronectin as a tumor **marker** detected by  
phage antibodies in relation to angiogenesis inhibition)

IT Antibodies and Immunoglobulins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(single chain; fibronectin as a tumor **marker** detected by  
phage antibodies in relation to angiogenesis inhibition)

IT 442850-93-3P 442850-94-4P  
RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP  
(Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(fibronectin as a tumor **marker** detected by phage antibodies  
in relation to angiogenesis inhibition)

IT 442990-49-0 442990-50-3 442990-51-4 442990-52-5, 9: PN: EP1224943  
PAGE: 10 unclaimed DNA  
RL: PRP (Properties)  
(unclaimed nucleotide sequence; fibronectin as a tumor **marker**  
detected by phage antibodies)

IT 442850-95-5 442850-96-6 442850-97-7  
RL: PRP (Properties)  
(unclaimed sequence; fibronectin as a tumor **marker** detected  
by phage antibodies)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:708108 CAPLUS  
DOCUMENT NUMBER: 138:3454  
TITLE: In vitro neutralization of Human Immunodeficiency  
Virus Type-1 subtype B and E with humanized monoclonal

antibody NM-01

AUTHOR(S): Yokono, Akira; Nakamori, Shogo; Nakamura, Mariko

CORPORATE SOURCE: Department of Microbiology (I), The Jikei University  
School of Medicine, Tokyo, 105-8461, Japan

SOURCE: Jikeikai Medical Journal (2002), 49(1), 3-11  
CODEN: JMEJAS; ISSN: 0021-6968

PUBLISHER: Jikei University School of Medicine

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Sep 2002

AB Humanization of certain antibody by transplanting the complementarity  
determining region (CDR) to a human Ig framework attempts to reduce the  
response  
against a foreign mol. in human body during passive immunization. We  
transferred the CDR from the murine monoclonal antibody (MoAb) NM-01 to a  
human IgG2b frame. The humanized NM-01 (hNM-01) neutralizes Human  
Immunodeficiency Virus Type-1 (HIV-1) as its murine progenitor. Moreover,  
hNM-01 shows enhanced neutralization of HIV-1. We have shown that this  
increase in reactivity may be attributed to residue 4 of the humanized x  
chain, where the presence of a methionine residue rather than the murine  
leucine appears to promote a more advantageous conformation of the  
**antigen binding site**, perhaps via packing  
interactions with the Vx CDR1. The capacity of hNM-01 to  
neutralize both lab strains and clin. isolates was also examined with the  
expectation that hNM-01 will prove suitable for development as a  
therapeutic agent. This reshaped antibody reacted with several clin.  
isolates of HIV-1 tested, including subtype B and subtype E. Moreover, we  
proved the inhibitory activity for syncytium formation, which indicates  
the ability for the inhibition of cell to cell HIV transmission. These  
findings may provide new opportunities for the development of a  
therapeutic Ig against AIDS.

CC 15-3 (Immunochemistry)

IT **Protein sequences**  
(amino acid sequence of humanized monoclonal antibody NM-01 that  
neutralized HIV-1 subtypes B and E)

IT **Antibodies and Immunoglobulins**  
RL: BPN (Biosynthetic preparation); PAC (Pharmacological  
activity); PRP (Properties); BIOL (Biological study); **PREP**  
(Preparation)  
(monoclonal, **humanized**; neutralizing; NM-01; neutralization  
of HIV-1 subtype B and E with **humanized** monoclonal antibody  
NM-01)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:98608 CAPLUS

DOCUMENT NUMBER: 132:136425

TITLE: Use of CD25 binding molecules in the treatment of  
rheumatoid arthritis or skin diseases

INVENTOR(S): Amlot, Peter Lloyd; Schreier, Max H.

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen  
Verwaltungsgesellschaft m.b.H.; University College  
London

SOURCE: PCT Int. Appl., 14 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006604	A2	20000210	WO 1999-EP5316	19990726
WO 2000006604	A3	20000615		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9957286	A1	20000221	AU 1999-57286	19990726
EP 1100829	A2	20010523	EP 1999-944294	19990726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002521491	T2	20020716	JP 2000-562400	19990726
US 2002110558	A1	20020815	US 2001-770002	20010125
PRIORITY APPLN. INFO.:			GB 1998-16281	A 19980727
			GB 1999-12460	A 19990527
			WO 1999-EP5316	W 19990726

ED Entered STN: 11 Feb 2000

AB Use of a CD25 binding mol., such as a chimeric anti-CD25 antibody, which comprises at least one **antigen binding site** comprising at least one domain that comprises a sequence of the hypervariable regions **CDR1**, **CDR2** and **CDR3** ; said **CDR1** having the amino acid sequence Arg-Tyr-Trp-Met-His, said **CDR2** having the amino acid sequence Ala-Ile-Tyr-Pro-Gly-Asn-Ser-Asp-Thr-Ser-Tyr-Asn-Gln-Lys-Phe-Glu-Gly, and said **CDR3** having the amino acid sequence Asp-Tyr-Gly-Tyr-Tyr-Phe-Asp-Phe, in the treatment of rheumatoid arthritis or inflammatory or hyperproliferative skin diseases.

IC ICM C07K016-28

ICS A61K039-395

CC 15-3 (Immunochemistry)

IT **Antibodies**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); **USES (Uses)**

(**chimeric**; use of CD25-binding mols. in the treatment of rheumatoid arthritis or skin diseases)

L93 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:49959 CAPLUS

DOCUMENT NUMBER: 135:151297

TITLE: Virolysis and in vitro neutralization of HIV-1 by humanized monoclonal antibody hNM-01

AUTHOR(S): Nakamura, Mariko; Terada, Masaki; Sasaki, Hiroyuki; Kamada, Minori; Ohno, Tsuneya

CORPORATE SOURCE: Department of Microbiology, Jikei University School of Medicine, Tokyo, 105-8461, Japan

SOURCE: Hybridoma (2000), 19(6), 427-434

CODEN: HYBRDY; ISSN: 0272-457X

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 19 Jan 2001

AB Antibody humanization by transplanting the complementarity determining region

(CDR) to a human framework aims to reduce the response of the human immune system against a foreign mol. during passive immunization. We transferred the CDR from the murine monoclonal antibody (MAb) NM-01 to a human IgG frame. The humanized NM-01 (hNM-01) recognizes the same epitope on Human Immunodeficiency Virus type 1 (HIV-1) envelope as its murine progenitor, but with greater efficiency, and shows enhanced neutralization of HIV-1. We have shown that this increase in reactivity may be attributed to residue 4 of the humanized  $\kappa$  chain, where the presence of a methionine residue rather than the murine leucine appears to promote a more advantageous conformation of the **antigen-binding site**, perhaps via packing interactions with the  $V\kappa$  CDR1. The capacity of humanized NM-01 to neutralize direct clin. isolates was also examined with the expectation that hNM-01 will prove suitable for development as a therapeutic agent. This reshaped antibody reacted with several clin. isolates of HIV-1 tested. Moreover, we proved the ability of this antibody of its activation of complement by flow cytometry and electron microscopy anal. Although hNM-01 alone was capable of neutralizing HIV-1, the presence of complement enhanced neutralization. The enhancement of complement activation was also observed in hNM-01 than murine progenitor. This finding supports a potential role for antibody-dependent complement-mediated virolysis and more effective neutralization in HIV-1 therapy.

CC 15-3 (Immunochemistry)

IT **Antibodies**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**;

BIOL (Biological study); **USES (Uses)**

(humanized; virolysis and in vitro neutralization of HIV-1 by humanized monoclonal antibody hNM-01)

IT **Antibodies**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); **THU (Therapeutic use)**;

BIOL (Biological study); **USES (Uses)**

(monoclonal, neutralizing; virolysis and in vitro neutralization of HIV-1 by humanized monoclonal antibody hNM-01)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:618323 CAPLUS

DOCUMENT NUMBER: 129:259328

TITLE: Nucleic acid molecules encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer

INVENTOR(S): Ring, David B.

PATENT ASSIGNEE(S): Chiron Corp., USA

SOURCE: U.S., 26 pp., Cont.-in-part of U.S. Ser. No. 323,566, abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5811267	A	19980922	US 1995-475000	19950607
US 5959084	A	19990928	US 1995-480527	19950607
US 6106833	A	20000822	US 1997-968335	19971112

US 6143873	A	20001107	US 1999-337800	19990622
PRIORITY APPLN. INFO.:			US 1990-605399	B1 19901029
			US 1993-141375	B1 19931022
			US 1994-323566	B2 19941017
			US 1995-452809	B1 19950530
			US 1995-480527	A1 19950607

ED Entered STN: 30 Sep 1998

AB Novel compns. are provided that are derived from **antigen-binding sites** of Igs having affinity for cancer antigens. The compns. exhibit immunol. binding properties of antibody mols. capable of binding specifically to a human tumor cell displaying a MDR phenotype. A number of synthetic mols. are provided that include CDR and FR regions derived from same or different Ig moieties. Also provided are single-chain polypeptides wherein VH and VL domains are attached by a single polypeptide linker. The scFv mols. can include ancillary polypeptide moieties which can be bioactive, or which provide a site of attachment for other useful moieties. The compns. are useful in specific binding assays, affinity purification schemes, drug or toxin targeting, imaging, and genetic or immunol. therapeutics for various cancers. The invention thus provides novel polypeptides, the DNAs encoding those polypeptides, expression cassettes comprising those DNAs, and methods of inducing the production of the polypeptides.

IC ICM C12P021-04

ICS C07K016-00; C07H021-04

INCL 435069700

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT **Antibodies**

RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); **PREP (Preparation); USES (Uses)**

(humanized; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT **Protein sequences**

(of single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 213396-02-2

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); **USES (Uses)**

(complementary-determining region **CDR1** of heavy chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 213396-07-7

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); **USES (Uses)**

(complementary-determining region **CDR1** of **light chain**-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 213396-03-3

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); **USES (Uses)**

(complementary-determining region **CDR2** of heavy chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 209338-02-3

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(complementary-determining region **CDR2** of **light chain**-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 213396-05-5

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(complementary-determining region **CDR3** of heavy chain-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

IT 213396-08-8

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(complementary-determining region **CDR3** of **light chain**-encoding; nucleic acid mols. encoding a single-chain antibody comprising the VH and VL complementarity-determining regions from antibody 15D3 specific for multiple-drug resistance in cancer)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L93 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:578106 CAPLUS

DOCUMENT NUMBER: 122:312624

TITLE: Humanization of mouse ONS-M21 antibody with the aid of hybrid variable regions

AUTHOR(S): Ohtomo, Toshihiko; Tsuchiya, Masayuki; Sato, Koh; Shimizu, Keiji; Moriuchi, Syusuke; Miyao, Yasuyoshi; Akimoto, Toshio; Akamatsu, Ken-ichi; Hayakawa, Toru; Ohsugi, Yoshiyuki

CORPORATE SOURCE: Chugai Pharmaceutical Co. Ltd., Fuji-Gotemba Research Laboratories, Shizuoka, 565, Japan

SOURCE: Molecular Immunology (1995), 32(6), 407-16  
CODEN: MOIMD5; ISSN: 0161-5890

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 27 May 1995

AB Mouse monoclonal antibody, ONS-M21, directed against human medulloblastoma cells, has been humanized by complementarity determining region (CDR) grafting. A humanized ONS-M21 VH region, comparable to the original mouse ONS-M21 VH region, was easily constructed based on framework regions (FRs) 1, 2 and 3 from human EU antibody and on FR4 from human ND antibody. Five alterations in the FRs were made at amino acids 27, 28, 29, 30 and 94 which are all part of the canonical structure for **CDR1** (H1). The humanized ONS-M21 VL regions were constructed based on the FRs from human REI antibody. The authors first identified five amino acid residues in the FRs at positions 20, 21, 71, 73 and 87 as having possible adverse influences on antigen binding. None of the versions with a variety of combinations at these five positions showed any binding to antigen. To identify the mouse residues that must be retained in the human FRs, hybrid VL regions were constructed by joining the mouse ONS-M21 VL region and the first humanized version within **CDR2**. The hybrid VL regions revealed that residues in FR1 and/or FR2 were critical in creating a functional **antigen binding site**. Redesigning several versions with alterations in FR1 and FR2 revealed that the Pro-46 residue was the only critical residue for creating an **antigen binding site**. This approach should be

helpful in identifying key residues in difficult cases of antibody humanization.

CC 15-3 (Immunochemistry)

Section cross-reference(s): 3

IT **Protein sequences**

(humanization of mouse ONS-M21 antibody to human medulloblastoma with aid of hybrid variable regions)

IT **Antibodies**

RL: BAC (Biological activity or effector, except adverse); **BPN** (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); **PREP** (Preparation) (monoclonal, **humanization** of mouse ONS-M21 antibody to human medulloblastoma with aid of hybrid variable regions)

L93 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:433149 CAPLUS

DOCUMENT NUMBER: 121:33149

TITLE: Reshaped monoclonal antibodies against an immunoglobulin isotype

INVENTOR(S): Hardman, Norman; Kolbinger, Frank; Saldanha, Jose

PATENT ASSIGNEE(S): Ciba-Geigy A. G., Switz.; Tanox Biosystems, Inc.; Novartis AG; Novartis Pharma GmbH

SOURCE: Eur. Pat. Appl., 68 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 589840	A1	19940330	EP 1993-810653	19930915
EP 589840	B1	20040414		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
SG 49856	A1	20020319	SG 1996-7641	19930915
AT 264388	E	20040415	AT 1993-810653	19930915
PT 589840	T	20040831	PT 1993-810653	19930915
EP 1452542	A2	20040901	EP 2004-8222	19930915
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
ES 2219640	T3	20041201	ES 1993-810653	19930915
AU 9347488	A1	19940331	AU 1993-47488	19930920
AU 675449	B2	19970206		
CA 2106719	AA	19940325	CA 1993-2106719	19930922
CA 2106719	C	20060328		
FI 9304145	A	19940325	FI 1993-4145	19930922
FI 114550	B1	20041115		
NO 9303394	A	19940325	NO 1993-3394	19930923
NO 318210	B1	20050221		
ZA 9307033	A	19940811	ZA 1993-7033	19930923
CN 1088986	A	19940706	CN 1993-119845	19930924
CN 1078250	B	20020123		
JP 06225788	A2	19940816	JP 1993-238180	19930924
JP 3636737	B2	20050406		
CN 1428352	A	20030709	CN 2001-143643	20011214
FI 2004000696	A	20040519	FI 2004-696	20040519
FI 115838	B1	20050729		
JP 2004357712	A2	20041224	JP 2004-201096	20040707
JP 3718214	B2	20051124		
PRIORITY APPLN. INFO.:			GB 1992-20228	A 19920924
			US 1992-952802	A 19920925



EP 1993-810653 A3 19930915  
 JP 1993-238180 A3 19930924

ED Entered STN: 23 Jul 1994  
 AB The reshaped human monoclonal antibody against isotypic determinants of IgE comprises the **antigen-binding sites** of CDR1, CDR2, and CDR3 of murine antibody TES-C21. The DNA sequences encoding the reshaped human C21VL (C21-L2 and C21-L3) and C21VH (C21-H3, C21-Hay1, and C21-Hay3) were synthesized and expressed in COS cells. Permanent cell lines producing the reshaped human antibodies were also prepared by transformation of mouse myeloma NSO cells. The antibodies of the invention are useful for diagnostics, prophylaxis, and treatment of allergy.  
 IC ICM C12N015-13  
 ICS C12P021-08; C12N005-10; C12N015-62; A61K039-395; G01N033-577; G01N033-68  
 CC 15-3 (Immunochemistry)  
 IT **Immunoglobulins**  
 RL: **PREP (Preparation)**  
 (humanized, to IgE, recombinant preparation of)  
 IT **Protein sequences**  
 (of humanized anti-IgE Ig variable regions)  
 IT **Immunoglobulins**  
 RL: **PREP (Preparation)**  
 (E, humanized Ig to, recombinant preparation of)

L93 ANSWER 36 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:209127 BIOSIS  
 DOCUMENT NUMBER: PREV200400209727  
 TITLE: Castleman's tumours and production of autoantibody in paraneoplastic pemphigus.  
 AUTHOR(S): Wang, Liangchun; Bu, Dingfang; Yang, Yong; Chen, Xixue; Zhu, Xuejun [Reprint Author]  
 CORPORATE SOURCE: Department of Dermatology, Peking University First Hospital, Beijing, 100034, China  
 ZHUXJ@public.bta.net.cn  
 SOURCE: Lancet (North American Edition), (February 14 2004) Vol. 363, No. 9408, pp. 525-531. print.  
 ISSN: 0099-5355 (ISSN print).  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 14 Apr 2004  
 Last Updated on STN: 14 Apr 2004

AB Background Paraneoplastic pemphigus is an autoimmune mucocutaneous disease associated with Castleman's tumours, which when surgically removed often result in great improvement of mucocutaneous lesions. An IgG autoantibody against epidermal proteins is often used as a diagnostic **marker** for disease. Our aim was to ascertain the role of Castleman's tumours in production of the autoantibody and pathogenesis of paraneoplastic pemphigus. Methods We enrolled seven patients with paraneoplastic pemphigus associated with Castleman's disease and assessed the effect of removal of tumours on mucocutaneous lesions in six individuals and on autoantibody titre with indirect immunofluorescence in four patients. We cultured tumour cells from one patient and assayed the secreted autoantibody. Finally, we characterised the gene sequence and expression of the variable region of the immunoglobulin **heavy chain** (IgVH) in tumour B cells from all patients by reverse transcription-PCR,

DNA sequencing, and in-situ hybridisation. Findings Cutaneous lesions disappeared within 6-11 weeks after resection of tumours. Mucosal lesions also improved in this period, but lasted for 5-10 months overall. Autoantibody titre decreased and became undetectable within 5-9 weeks in three of four patients assessed. We identified secreted autoantibody, similar to that identified in patients' serum, in cultured tumour cells. The tumour B-cells of the seven patients shared and expressed two rearrangement patterns of complementarity determining region 3 (CDR3) of IgVH. Interpretation Secreted autoantibody from Castleman's tumours, which reacts against epidermal proteins, could be an essential factor in the pathogenesis of paraneoplastic pemphigus. We noted clonal rearrangement, resulting in similar variable regions of IgVH, in tumour B cells isolated from all seven patients. However, whether this pattern is associated with autoimmunity remains to be ascertained.

- IT Major Concepts
  - Clinical Immunology (Human Medicine, Medical Sciences);
  - Oncology (Human Medicine, Medical Sciences)
- IT Parts, Structures, & Systems of Organisms
  - B cells: blood and lymphatics, immune system
- IT Diseases
  - Castleman's disease: immune system disease, neoplastic disease, immunology
  - Giant Lymph Node Hyperplasia (MeSH)
- IT Diseases
  - autoimmune mucocutaneous disease: immune system disease
- IT Diseases
  - paraneoplastic pemphigus: immune system disease, neoplastic disease, immunology, pathology
- IT Diseases
  - tumor: neoplastic disease
  - Neoplasms (MeSH)
- IT Chemicals & Biochemicals
  - IgG autoantibody: production; epidermal proteins;
  - immunoglobulin heavy chain: complementarity
  - determining region 3

L93 ANSWER 37 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:36139 BIOSIS  
 DOCUMENT NUMBER: PREV200500039088  
 TITLE: High sensitivity of chemiluminescent methodology for detection of clonal CDR3 sequences in patients with acute lymphoblastic leukemia.  
 AUTHOR(S): Leal, E.; Jaloma-Cruz, A. R.; Barros-Nunez, P. [Reprint Author]  
 CORPORATE SOURCE: CIBODiv Genet, IMSS, Sierra Mojada 800, Col Independencia ZC I-3838, Guadalajara, Jalisco, 44340, Mexico  
 pbarros\_gdl@yahoo.com.mx  
 SOURCE: Hematological Oncology, (June 2004) Vol. 22, No. 2, pp. 55-61. print.  
 ISSN: 0278-0232 (ISSN print).  
 DOCUMENT TYPE: Article  
 General Review; (Literature Review)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 19 Jan 2005  
 Last Updated on STN: 19 Jan 2005  
 AB Detection of minimal residual disease (MRD) in patients with B-cell acute lymphoblastic leukemia (B-ALL) has been achieved using several radioactive labelling methodologies; however, limited information exists about the use of chemiluminescent labelling. Although many malignant disorders are

related to cytogenetic alterations, there is not a consistent chromosomal translocation that could serve as a tumour **marker** for the monitoring of MRD. ALL are derived from B-lymphocytes in 80% of cases. In the early stages of their maturation, the immunoglobulin **heavy chain** genes (IgH) undergo rearrangements among their V, D, and J segments, giving rise to the Complementary Determining Regions (CDR). Among these, **CDR3** is considered unique for each lymphocyte and used as a tumour-specific **marker** in B-ALL patients. In this study, the **CDR3** was labelled with digoxigenin and used as a patient-specific probe to test its sensitivity for further detection of MRD. Fourteen pretreatment samples of bone marrow (BM) or peripheral blood (PB) from B-ALL patients were included. Tumour-specific probes were designed from each clonal product by elimination of the consensus sequences. Ten digoxigenin-labelled probes were hybridized with a mixture of their respective clonal **DNA** and the polyclonal product from a normal healthy donor, in serial dilutions from 1: 1 up to 1:107. A sensitivity range of 1: 103-1:106 was obtained, with an average of 1:105. Crossed tests performed in four patients, showed right probe specificity in all cases. We propose that the design of allele-specific probes with chemiluminescent labelling, represents a reliable, sure and sensitive alternative methodology for MRD detection in patients with B-cell lymphoproliferative disorders. Copyright Copyright 2004 John Wiley & Sons, Ltd.

- IT Major Concepts
  - Hematology (**Human** Medicine, Medical Sciences); Methods and Techniques; Oncology (**Human** Medicine, Medical Sciences)
- IT Parts, Structures, & Systems of Organisms
  - B-lymphocyte: blood and lymphatics, immune system; bone marrow: blood and lymphatics, immune system; peripheral blood: blood and lymphatics
- IT Diseases
  - B-cell acute lymphoblastic leukemia: blood and lymphatic disease, neoplastic disease
  - Leukemia, B-Cell, Acute (MeSH)
- IT Diseases
  - minimal residual disease: neoplastic disease
  - Neoplasm, Residual (MeSH)
- IT Chemicals & Biochemicals
  - DNA**; digoxigenin; **immunoglobulin heavy chain** gene

L93 ANSWER 38 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:356773 BIOSIS

DOCUMENT NUMBER: PREV200300356773

TITLE: **Immunoglobulin Light Chain**

Rearrangements in B-Cell Differentiation: Lessons from Myeloma.

AUTHOR(S): Perfetti, Vittorio [Reprint Author]; Vignarelli, Maurizio Colli; Navazza, Valentina; Palladini, Giovanni; Giachino, Claudia; Merlini, Giampaolo

CORPORATE SOURCE: Internal Medicine and Medical Oncology, IRCCS Policlinico S. Matteo, Pavia, Italy

SOURCE: Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract No. 2639. print.

Meeting Info.: 44th Annual Meeting of the American Society of Hematology. Philadelphia, PA, USA. December 06-10, 2002. American Society of Hematology.

CODEN: BLOOAW. ISSN: 0006-4971.

DOCUMENT TYPE: Conference; (Meeting)

Conference; (Meeting Poster)

Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 6 Aug 2003  
 Last Updated on STN: 6 Aug 2003

AB Recent evidence document that B cells can undergo secondary rearrangements in the **light chain** loci even though they already express a functional antibody receptor. As consequence, new variable (V) regions can be formed. This process can occur during marrow B-cell maturation ("receptor editing", a phenomenon linked to self-tolerance) or at some point of the germinal center reaction ("receptor revision", a still disputed process that is possibly related to antibody-affinity maturation). To study **light chain** secondary **recombination** events, we used myeloma as a "single cell-model" of post-germinal center, antigen-selected B cells and took advantage of the fact that kappa **light chains** usually rearrange before the lambda ones. The kappa locus of lambda myeloma (29 clones) was then searched for V-J rearrangements with features that might suggest expression prior to lambda **light chain**-isotype switching (in frame rearrangement, no stop codons, no pseudogenes). In line with the hierarchical model of ordered immunoglobulin **light chain** gene rearrangement, **DNA**-PCR amplification demonstrated that all lambda myeloma cases showed both kappa alleles rearranged and inactivated via the kappa deleting element (Kde). Kde was preferentially rearranged to a Vkappa segment (Vkappa-Kde, 69%) than to the intronic **recombination** signal sequence (IRSS) (Vkappa-Jkappa/IRSS-Kde, 31%). Since only IRSS-Kde inactivation preserves former Vkappa-Jkappa regions, no more than a fraction (18 of 58, 31%) of alleles were informative. Vkappa-Jkappa remnants showed Vkappa family usage different from normal and myeloma kappa **light chains**, because of overrepresentation of the VkappaII family (50% of cases). Increased usage of distal Vkappa and Jkappa segments (i.e. Jkappa4) was also observed, a **marker** of multiple secondary rearrangements. Evidence of **light chain** receptor changes, either as "editing" or "revision", were observed in a significant proportion (4/18, 22%) of Vkappa-Jkappa remnants (i.e., functional Vkappa segments and productively rearranged CDR3). Somatic mutations, a **marker** of expression in the germinal center, were found in 2 of 4 productive joints. One case (involving B3, the single member of the VkappaIV family, and Jkappa3) presented 10 nucleotide substitutions that were distributed in frameworks (4/6) and CDRs (6/10). These data strongly suggest that the Vkappa-Jkappa joint was part of the immunoglobulin receptor when the original myeloma B cell underwent the germinal center reaction, it was hypermutated, and subsequently revised to lambda **light chain**. This study demonstrates that **light chain** editing and revision can occur during the evolution of a B cell clone toward its terminal plasma cell differentiation. Intense and renewed RAG1/2 activity may contribute to immunoglobulin translocations that are common in B-cell disorders.

IT Major Concepts

Clinical Immunology (**Human** Medicine, Medical Sciences);  
 Hematology (**Human** Medicine, Medical Sciences); Oncology (**Human** Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms

B-cell: blood and lymphatics, immune system

IT Diseases

myeloma: blood and lymphatic disease, immune system disease, neoplastic disease

Multiple Myeloma (MeSH)

IT Chemicals & Biochemicals

CDR3

L93 ANSWER 39 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
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ACCESSION NUMBER: 2003:336498 BIOSIS

DOCUMENT NUMBER: PREV200300336498

TITLE: Absence of B-Cell, NK-Cell, Myeloid or CD34+ Cell  
Engraftment in Some X-Linked Severe Combined  
Immunodeficiency (XSCID) Patients Following Haploidentical  
Transplant.

AUTHOR(S): Hay, Beverly N. [Reprint Author]; Puck, Jennifer M.  
[Reprint Author]; Uzel, Gulbu [Reprint Author]; Davis, Joie  
[Reprint Author]; Hsu, Amy P. [Reprint Author]; Linton,  
Gilda [Reprint Author]; Woltz, Patricia [Reprint Author];  
Malech, Harry L. [Reprint Author]

CORPORATE SOURCE: Genet and Mol Biol Branch, NHGRI, NIH, Bethesda, MD, USA  
SOURCE: Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract  
No. 1800. print.

Meeting Info.: 44th Annual Meeting of the American Society  
of Hematology. Philadelphia, PA, USA. December 06-10, 2002.  
American Society of Hematology.

CODEN: BLOOAW. ISSN: 0006-4971.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; (Meeting Poster)  
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 23 Jul 2003

Last Updated on STN: 23 Jul 2003

AB XSCID, characterized by absent T cells and non-functional B cells, is  
caused by defects in IL2RG, the gene encoding the common gamma chain  
(gammac) of receptors for IL-2, -4, -7, -9, -15 and -21. Although the  
standard therapy, allogeneic bone marrow transplant (BMT), is life-saving  
and has completely cured some patients, many have persistent cellular  
immune defects and fail to make antibodies. We evaluated clinical status,  
hematopoietic lineage engraftment, and immune function in 8  
immunodeficient post-BMT XSCID patients from 4 BMT centers. These  
patients were 5-18 years old and had received 1-4 non-conditioned, T-cell  
depleted, haploidentical BMTs 3-11 years earlier. They continued to  
experience frequent infections leading to school absences and  
hospitalizations. All required regular immunoglobulin replacement.  
Chronic health problems were: sinusitis (7/8); rashes, including chronic  
viral infections with warts and/or molluscum contagiosum (6/8); chronic  
pulmonary changes (6/8); growth failure (5/8); hepatitis (5/8); diarrhea  
or colitis (4/8); and hearing loss (1/8). Etiologies of these problems  
may include repeated or chronic sub-clinical infections, autoimmunity,  
graft versus host disease, and adverse effects of antibiotics.  
Engraftment was evaluated by genotyping DNA from purified hematopoietic  
lineages in comparison with donor and pre-BMT host DNA. T cells were of  
donor origin in 6/8 patients, but B cells, granulocytes and  
monocytes were host-derived in 8/8 patients. Immunological  
assessment included lymphocyte number, immunoglobulin levels,  
immunophenotyping, proliferation, and levels of T cell receptor excision  
circles (TRECs). All patients had lymphopenia (mean 1500/mul) and one had  
eosinophilia averaging 2072/mul. Serum IgA and IgM levels were low or  
undetectable. CD3+ T-cell numbers were low in 5/8. Proliferation to  
mitogens was decreased or absent in 6/8, and antigen-specific responses  
were impaired in 8/8. TRECs were low in one patient and absent in  
another. In addition, spectratyping displayed skewed CDR3  
patterns in 5/5. Six patients received G-CSF (10 mug/kg x 6 days) and  
underwent apheresis to harvest peripheral mobilized stem cells, study  
chimerism in CD34+ cells, and collect cells for potential gene

therapy. All 6 XSCID patients demonstrated marked increase in WBC (mean 50,000/mul) and circulating CD34+ cells (18-98/mul) in response to mobilization, in contrast to 2 previously treated ADA deficient SCID patients who did not respond to G-CSF mobilization with increases in WBC or CD34+ cells. PCR assay of CD34+ cell **chimerism** in 6/6 patients showed 100% host **markers**, suggesting that their BMTs provided little or no permanent hematopoietic stem cell (HSC) replacement and consistent with the observed ineffective production of naive T cells. However, the persistence of circulating donor T cells highlights the in vivo selective advantage for CD3+ cells with functional gammac. Ex vivo transfer of IL2RG to autologous HSC instead of BMT in newly diagnosed XSCID infants (Fischer et al.) demonstrated reconstitution of immunity. Gene therapy for older patients with poor immune reconstitution post-BMT may offer similar benefit. Ex vivo addition of correct IL2RG to autologous CD34+ cells could improve production of functional lymphoid lineages in these patients.

- IT Major Concepts
  - Clinical Immunology (**Human** Medicine, Medical Sciences);
  - Hematology (**Human** Medicine, Medical Sciences); Methods and Techniques; Pediatrics (**Human** Medicine, Medical Sciences)
- IT Parts, Structures, & Systems of Organisms
  - B-cell: blood and lymphatics, immune system; CD34-positive cell: blood and lymphatics, immune system; NK cell: blood and lymphatics, immune system, natural killer cell; T cell: blood and lymphatics, immune system; WBC: blood and lymphatics, immune system, white blood cell; bone marrow: blood and lymphatics, immune system; lung: respiratory system; lymphocyte: blood and lymphatics, immune system; myeloid cell: blood and lymphatics, immune system; serum: blood and lymphatics
- IT Diseases
  - X-linked severe combined immunodeficiency: genetic disease, immune system disease
- IT Diseases
  - chronic pulmonary disease: respiratory system disease
- IT Diseases
  - colitis: digestive system disease
  - Colitis (MeSH)
- IT Diseases
  - diarrhea: digestive system disease
  - Diarrhea (MeSH)
- IT Diseases
  - eosinophilia: blood and lymphatic disease
  - Eosinophilia (MeSH)
- IT Diseases
  - growth failure: disease-miscellaneous
- IT Diseases
  - hearing loss: ear disease
  - Hearing Disorders (MeSH)
- IT Diseases
  - hepatitis: digestive system disease
  - Hepatitis (MeSH)
- IT Diseases
  - lymphopenia: blood and lymphatic disease, immune system disease
  - Lymphopenia (MeSH)
- IT Diseases
  - molluscum contagiosum: infectious disease, integumentary system disease, viral disease
  - Molluscum Contagiosum (MeSH)
- IT Diseases
  - sinusitis: respiratory system disease
  - Sinusitis (MeSH)

IT Diseases  
 skin rash: integumentary system disease  
 IT Diseases  
 wart: infectious disease, integumentary system disease, viral disease  
 IT Chemicals & Biochemicals  
 G-CSF [granulocyte-colony stimulating factor]: immunologic-drug; IgG [**immunoglobulin G**]; IgM [**immunoglobulin M**]; T cell  
 receptor excision circle [TREC]; **immunoglobulin**

L93 ANSWER 40 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
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ACCESSION NUMBER: 2000:246719 BIOSIS  
 DOCUMENT NUMBER: PREV200000246719  
 TITLE: Optimized multiplex IgH/ras PCR: A tool for quantitative  
 monitoring of B-lymphoproliferative disorders.  
 AUTHOR(S): Slavickova, Alena [Reprint author]; Ullmannova, V.; Klener,  
 P.  
 CORPORATE SOURCE: 1st Department of Internal Medicine, Department of  
 Hematology, Laboratory of Molecular Biology, Charles  
 University, U Nemocnice 2, 128 08, Prague 2, Czech Republic  
 SOURCE: Biotechniques, (April, 2000) Vol. 28, No. 4, pp. 716-721.  
 print.  
 CODEN: BTNQDO. ISSN: 0736-6205.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 14 Jun 2000  
 Last Updated on STN: 5 Jan 2002

AB The use of quantitative PCR is recommended to monitor the level of  
 residual hematological malignancies. The proposed multiplex IgH/ras PCR  
 uses a co-amplification of the clonal **CDR3** rearrangement of the  
 immunoglobulin **heavy chain** gene (IgH) as a disease  
**marker** and a segment of the Hras 1 gene containing codon 61 (ras)  
 as a control gene. Serial dilutions of stored diagnostic **DNA**s  
 are examined together in the same PCR at a sub-plateau phase and, after  
 analysis by densitometry, the amount of **CDR3** product is related  
 to the ras product. An increase of this ratio at comparable amounts of  
**DNA** is viewed as an increase of malignant cells. This endpoint  
 PCR quantifying approach appears to be applicable in monitoring  
 B-lymphoproliferative disorders as was shown to be true in B-cell  
 non-Hodgkin's lymphoma and may provide information on disease activity and  
 treatment outcome.

IT Major Concepts  
 Molecular Genetics (Biochemistry and Molecular Biophysics); Immune  
 System (Chemical Coordination and Homeostasis); Oncology (**Human**  
 Medicine, Medical Sciences); Methods and Techniques  
 IT Diseases  
 B-lymphoproliferative disorders: blood and lymphatic disease, immune  
 system disease, neoplastic disease, quantitative monitoring  
 IT Diseases  
 Hodgkin's disease: blood and lymphatic disease, immune system disease,  
 neoplastic disease, quantitative monitoring  
 Hodgkin Disease (MeSH)  
 IT Chemicals & Biochemicals  
**DNA**: analysis; **immunoglobulin H**: analysis; ras:  
 analysis

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ACCESSION NUMBER: 1998:428380 BIOSIS  
 DOCUMENT NUMBER: PREV199800428380

TITLE: Design and use of a phage display library: **Human antibodies** with subnanomolar affinity against a **marker** of angiogenesis eluted from a two-dimensional gel.

AUTHOR(S): Pini, Alessandro; Viti, Francesca; Santucci, Annalisa; Carnemolla, Barbara; Zardi, Luciano; Neri, Paolo; Neri, Dario [Reprint author]

CORPORATE SOURCE: Institut fuer Molekularbiologie und Biophysik, ETH Honggerberg, CH-8093 Zurich, Switzerland

SOURCE: Journal of Biological Chemistry, (Aug. 21, 1998) Vol. 273, No. 34, pp. 21769-21776. print.  
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 7 Oct 1998  
Last Updated on STN: 7 Oct 1998

AB We report the construction and the use of a phage display **human** antibody library (>3 X 10<sup>8</sup> clones) based on principles of protein design. A large repertoire of functional antibodies with similar properties was produced by appending short variable complementarity determining region 3 (CDR3) onto the two antibody germ line segments most frequently found in **human** antibodies. With this strategy we concentrated sequence diversity in regions of the antibody structure that are centrally located in the **antigen binding site**, while leaving residues in more peripheral positions available for further mutagenesis aimed at improving the affinity of the selected antibodies. In addition, the library was tested by selecting antibodies against six biologically relevant antigens. Using only 0.3 mg of antigen eluted from a two-dimensional gel spot, we isolated binders specific for the ED-B domain of fibronectin, a **marker** of angiogenesis. These antibodies recognize the native antigen with affinities in the 10<sup>7</sup>10<sup>8</sup> M<sup>-1</sup> range, and perform well in immunosorbent assays, in two-dimensional Western blotting and in immunohistochemistry. The affinity of one anti-ED-B antibody was improved by 27-fold by combinatorially mutating six strategically selected residues in the heavy chain variable domain. A further 28-fold affinity improvement could be achieved by mutating residues 32 and 50 of the light chain. The resulting antibody, L19, bound to the ED-B domain of fibronectin with very high affinity (K<sub>d</sub> = 54 pM), as determined by real-time interaction analysis with surface plasmon resonance detection, band shift analysis, and by competition experiments with electrochemiluminescent detection.

IT Major Concepts  
Biochemistry and Molecular Biophysics; Methods and Techniques

IT Chemicals & Biochemicals  
phage display **human antibody** library: cloning, synthesis

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ACCESSION NUMBER: 1998:512661 BIOSIS

DOCUMENT NUMBER: PREV199800512661

TITLE: Structure of Bcl-1 and IgH-CDR3 rearrangements as clonal **markers** in mantle cell lymphomas.

AUTHOR(S): Pott, C. [Reprint author]; Tiemann, M.; Linke, B.; Ott, M. M.; Von Hofen, M.; Bolz, I.; Hiddemann, W.; Parwaresch, R.; Kneba, M.

CORPORATE SOURCE: 2nd Dep. Internal Med., Chemnitzstr. 33, D-24116 Kiel, Germany

SOURCE: Leukemia (Basingstoke), (Oct., 1998) Vol. 12, No. 10, pp. 1630-1637. print.



CODEN: LEUKED. ISSN: 0887-6924.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Dec 1998

Last Updated on STN: 18 Dec 1998

AB Mantle cell lymphoma represent a clinicopathologically distinct entity of malignant non-Hodgkin's lymphoma (NHL) and are characterized by a specific chromosomal translocation t(11;14)(q13;q32) involving the cyclin D1 gene also designated as bcl-1/PRAD1 gene on chromosome 11 and the **heavy chain** immunoglobulin joining region on chromosome 14. We have established a PCR method to amplify t(11;14) junctional sequences in **DNA** from fresh frozen and paraffin-embedded tissue by bcl-1-specific primers in combination with a consensus immunoglobulin JH primer. A total of 65 cases histologically classified as mantle cell lymphoma (MCL) were analyzed for the presence of a t(11;14) translocation and monoclonal IgH-**CDR3** rearrangements. From 26 patients with classical MCL and three cases with the anaplastic variant of MCL fresh frozen biopsy material was available for **DNA** extraction. We detected a bcl-1/JH rearrangement in 12 out of 29 samples (41%). In 36 cases paraffin-embedded lymph node tissue was the only source of **DNA**. In this material we found a bcl-1/JH rearrangement in six out of 31 samples with intact **DNA** (20%). To confirm the specificity of the PCR and to determine the bcl-1/JH junctional region sequences as clone-specific **marker** in individual patients we characterized the junctional **DNA** sequences by direct PCR sequencing in 16 cases. Interestingly we found that six bcl-1/JH junctions harbored D. segments in their N regions indicating that bcl-1/JH rearrangements can occur in a later stage of B cell ontogeny during which the complete VH to DHJH Joining or VH-replacement takes place. To investigate the suitability of IgH-**CDR3** as sensitive molecular **marker** for those MCL patients in which a t(11;14) translocation can not easily be amplified, we additionally analysed 60 cases for the presence of monoclonally rearranged IgH genes by IgH-**CDR3**-PCR. A monoclonal IgH-**CDR3** PCR product could be identified in 24 out of 29 fresh frozen samples (79%) whereas only 11 out of 31 samples (36%) with paraffin-derived **DNA** were positive. We demonstrate that automated fluorescence detection of monoclonal IgH-**CDR3** PCR products allows the rapid and sensitive monitoring of minimal residual disease also in cases that lack a PCR amplifiable t(11;14) translocation. In combination with allele-specific primers the procedure may improve current experimental approaches for detection of occult MCL cells at initial staging and residual disease during and after therapy.

IT Major Concepts

Molecular Genetics (Biochemistry and Molecular Biophysics); Tumor Biology

IT Diseases

mantle cell lymphoma: blood and lymphatic disease, neoplastic disease  
Lymphoma, Small Cleaved-Cell, Diffuse (MeSH)

IT Chemicals &amp; Biochemicals

**immunoglobulin heavy chain-CDR3**gene: rearrangement structure, tumor clonal **marker**; Bcl-1gene: rearrangement structure, tumor clonal **marker**

L93 ANSWER 43 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:37446 BIOSIS

DOCUMENT NUMBER: PREV199698609581

TITLE: A CD10-positive subset of malignant cells is identified in multiple myeloma using PCR with patient-specific **immunoglobulin** gene primers.

AUTHOR(S): Cao, J.; Vescio, R. A.; Rettig, M. B.; Hong, C. H.; Kim, A.; Lee, J. C.; Lichtenstein, A. K.; Berenson, J. R.  
[Reprint author]

CORPORATE SOURCE: 11-260 Factor Build., UCLA Sch. Med., 10833 Le Conte Ave., Los Angeles, CA 90024, USA

SOURCE: Leukemia (Basingstoke), (1995) Vol. 9, No. 11, pp. 1948-1953.  
CODEN: LEUKED. ISSN: 0887-6924.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 26 Jan 1996  
Last Updated on STN: 26 Jan 1996

AB Immunophenotypic studies show the presence of CD10-bearing malignant cells in a small subset of multiple myeloma (MM) patients. We used a sensitive PCR-based technique in order to determine the frequency that MM patients contain a malignant subpopulation which expresses this antigen. The immunoglobulin (Ig) **heavy chain** variable region (V-H) gene sequence expressed by the malignant clone in MM can be used as a tumor specific **marker**. After determining this sequence in six MM patients, patient specific V-H oligonucleotide primers from complementarity determining region (CDR) sequences were generated. Bone marrow mononuclear cells from these patients were incubated with two different anti-CD10 antibodies or isotype identical murine IgG controls. Cells were then sorted by flow cytometry into the 1% brightest cells containing gt 99.99% CD10-positive cells and two fractions including the 90 and 10% dimmest staining cells. PCR amplification was performed on DNA from approximately 10<sup>-4</sup> cells (0.1 µg) using patient specific CDR1 and CDR3 primers. Detectable PCR product was obtained in each sorted sample although the intensity of the band was much higher in cells lacking CD10 expression (the 90 and 10% dimmest fractions) than in the CD10-bearing (1% brightest) population. These results imply that there is a small population of CD10-bearing clonal cells in most, if not all patients with MM.

IT Major Concepts  
Blood and Lymphatics (Transport and Circulation); Cell Biology;  
Enzymology (Biochemistry and Molecular Biophysics); Genetics;  
Hematology (**Human** Medicine, Medical Sciences); Oncology (**Human** Medicine, Medical Sciences); Pathology

L93 ANSWER 44 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:209733 BIOSIS

DOCUMENT NUMBER: PREV199395110958

TITLE: Primary structure of the variable regions of a monoclonal **antibody** MUSE11 recognizing the tandem repeat domain of a mucin core protein, MUC1.

AUTHOR(S): Hinoda, Yuji [Reprint author]; Arimura, Yoshiaki; Itoh, Fumio; Adachi, Masaaki; Tsujisaki, Masayuki; Imai, Kohzoh; Yachi, Akira

CORPORATE SOURCE: Dep. Intern. Med., Sect. 1, Sapporo Med. Coll., S-1, W-16 Chuo-ku, Sapporo 060, Japan

SOURCE: Journal of Clinical Laboratory Analysis, (1993) Vol. 7, No. 2, pp. 100-104.  
CODEN: JCANEM. ISSN: 0887-8013.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 23 Apr 1993  
Last Updated on STN: 23 Apr 1993

AB A monoclonal antibody (Mab) MUSE11 recognizes an epitope in the tandem repeat domain of a mucin core protein, MUC1. We show that the epitope of

Mab MUSE11 could be within the continuous amino acid sequence PDTRPAPG. Since there is increasing evidence indicating that this region is highly immunogenic. **cDNA** cloning of the variable regions of **heavy-chain** (VH) and of **light-chain** (VL) of Mab MUSE11 was performed by using RT-PCR to provide a basis for analyzing the structure of the antibody-antigen complex and for producing anti-idiotypic antibodies. The deduced amino acid sequence revealed that the VH and VK of Mab MUSE11 could be assigned to subgroups IIIa and II of mouse immunoglobulin heavy and **light chains**, respectively. When compared with the V regions of others MAbs in the same subgroup, the complementary determining region 3 (CDR3) in the VH region of Mab MUSE11 consisted of a unique sequence that may be important in defining the specificity of Mab MUSE11.

## IT Major Concepts

Clinical Chemistry (Allied Medical Sciences); Gastroenterology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Reproductive System (Reproduction)

L93 ANSWER 45 OF 45 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1990:416413 BIOSIS  
DOCUMENT NUMBER: PREV199090077214; BA90:77214  
TITLE: DEVELOPMENT OF A HIGHLY SENSITIVE ASSAY BASED ON THE POLYMERASE CHAIN REACTION FOR RARE B-LYMPHOCYTE CLONES IN A POLYCLONAL POPULATION.  
AUTHOR(S): BRISCO M J [Reprint author]; TAN L W; ORSBORN A M; MORLEY A A  
CORPORATE SOURCE: DEP HAEMATOL, FLINDERS MED CENTRE, BEDFORD PARK, SOUTH AUSTRALIA 5042  
SOURCE: British Journal of Haematology, (1990) Vol. 75, No. 2, pp. 163-167.  
CODEN: BJHEAL. ISSN: 0007-1048.  
DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: ENGLISH  
ENTRY DATE: Entered STN: 17 Sep 1990  
Last Updated on STN: 17 Sep 1990

AB A method has been developed to use the polymerase chain reaction to amplify and sequence the chain determining region 3 (CDR3) of the **human** immunoglobulin **heavy-chain** gene, and to use the sequence as a **marker** for rare neoplastic B lymphocytes. Consensus primers for the Variable and Joining regions of the gene were constructed and shown to enable efficient amplification, directed cloning, and sequencing of CDR3. Using leukaemic cell line PFMC as a test system, CDR3 was sequenced, specific primers synthesized, and PFMC DNA was detected down to a dilution of 1:1300 in DNA from normal lymphocytes. This strategy should be useful for monitoring therapy and detecting early disease relapse in B lymphoproliferative disease.

## IT Major Concepts

Blood and Lymphatics (Transport and Circulation); Cell Biology; Enzymology (Biochemistry and Molecular Biophysics); Genetics; Hematology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Pathology

L94 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:934247 CAPLUS

DOCUMENT NUMBER: 141:409778  
 TITLE: Monoclonal antibody G250, recombinant or chimeric antibodies and fragments for **diagnosis** and treatment of **cancer**  
 INVENTOR(S): **Bolhuis, Reinier L. H.**; Wohl, Thorsten; Bottger, Volker  
 PATENT ASSIGNEE(S): Willex A.-G., Germany  
 SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. No. PCT/EP02/01283.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004219633	A1	20041104	US 2003-635908	20030807
WO 2002063010	A2	20020815	WO 2002-EP1283	20020207
WO 2002063010	C2	20020912		
WO 2002063010	A3	20031127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:  
 US 2001-266853P P 20010207  
 US 2001-327008P P 20011005  
 WO 2002-EP1283 A2 20020207

L94 ANSWER 2 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:437654 BIOSIS

DOCUMENT NUMBER: PREV200200437654

TITLE: TCR-like **human antibodies** expressed on **human** CTLs mediate **antibody** affinity-dependent cytolytic activity.

AUTHOR(S): Chames, Patrick; Willemsen, Ralph A.; Rojas, Gertrudis; Dieckmann, Detlef; Rem, Louise; Schuler, Gerold; **Bolhuis, Reinder L.**; Hoogenboom, Hennie R. [Reprint author]

CORPORATE SOURCE: Dyax S.A., Bld du Rectorat 27B, Sart Tilman, University Campus, Building 22, 4000, Liege 1, Belgium  
 hhoogenboom@dyax.com

SOURCE: Journal of Immunology, (July 15, 2002) Vol. 169, No. 2, pp. 1110-1118. print.

CODEN: JOIMA3. ISSN: 0022-1767.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 14 Aug 2002

Last Updated on STN: 14 Aug 2002

L94 ANSWER 3 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:435925 BIOSIS

DOCUMENT NUMBER: PREV199900435925

TITLE: Molecular and immunologic programming of T cell specificity

for cancer therapy.  
 AUTHOR(S): **Bolhuis, Reinder L. H.** [Reprint author]  
 CORPORATE SOURCE: Department of Clinical and Tumor Immunology, Daniel den  
 Hoed Cancer Center/Academic Hospital Rotterdam, 3008 AE,  
 Rotterdam, Netherlands  
 SOURCE: Anticancer Research, (May-June, 1999) Vol. 19, No. 3A, pp.  
 1998. print.  
 Meeting Info.: First Symposium on Local Cytokine Therapy of  
 Cancer: Interleukin-2, Inferferon and Related Cytokines.  
 Hamburg, Germany. April 29-May 1, 1999.  
 CODEN: ANTRD4. ISSN: 0250-7005.  
 DOCUMENT TYPE: Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 18 Oct 1999  
 Last Updated on STN: 18 Oct 1999

L94 ANSWER 4 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 ACCESSION NUMBER: 1999:103415 BIOSIS  
 DOCUMENT NUMBER: PREV199900103415  
 TITLE: Level of anti-mouse-**antibody** response induced by  
 bi-specific monoclonal **antibody** OC/TR in  
 ovarian-carcinoma patients is associated with longer  
 survival.  
 AUTHOR(S): Miotti, Silvia; Negri, Donatella R. M.; Valota, Olga;  
 Calabrese, Marcella; **Bolhuis, Reinder L. H.**;  
 Gratama, Jan W.; Colnaghi, Maria I.; Canevari, Silvana  
 [Reprint author]  
 CORPORATE SOURCE: Div. Exp. Oncol. E, Ist. Naz. Tumori Milano, 20133 Milan,  
 Italy  
 SOURCE: International Journal of Cancer, (Feb. 19, 1999) Vol. 84,  
 No. 1, pp. 62-68. print.  
 CODEN: IJCNAW. ISSN: 0020-7136.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 4 Mar 1999  
 Last Updated on STN: 4 Mar 1999

L94 ANSWER 5 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 ACCESSION NUMBER: 1998:50542 BIOSIS  
 DOCUMENT NUMBER: PREV199800050542  
 TITLE: **Chimeric** bispecific OC/TR monoclonal  
**antibody** mediates lysis of tumor cells expressing  
 the folate-binding protein (MOv18) and displays decreased  
 immunogenicity in patients.  
 AUTHOR(S): Luiten, Rosalie M. [Reprint author]; Warnaar, Sven O.;  
 Sanborn, David; Lamers, Cornelis H. J.; **Bolhuis,**  
**Reinder L. H.**; Litvinov, Sergey V.; Zurawski, Vincent  
 R., Jr.; Coney, Leslie R.  
 CORPORATE SOURCE: Dep. Pathol., Univ. Leiden, University Hosp. Build. 1,  
 L1-Q, PO Box 9600, 2300 RC Leiden, Netherlands  
 SOURCE: Journal of Immunotherapy, (Nov., 1997) Vol. 20, No. 6, pp.  
 496-504. print.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 27 Jan 1998  
 Last Updated on STN: 27 Jan 1998

L94 ANSWER 6 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 ACCESSION NUMBER: 1997:489865 BIOSIS

DOCUMENT NUMBER: PREV199799789068  
 TITLE: Local but no systemic immunomodulation by intraperitoneal treatment of advanced ovarian **cancer** with autologous T lymphocytes re-targeted by a bi-specific monoclonal **antibody**.  
 AUTHOR(S): Lamers, Cor H. J.; **Bolhuis, Reinder L. H.**; Warnaar, Seven O.; Stoter, Gerrit; Gratama, Jan W. [Reprint author]  
 CORPORATE SOURCE: Dep. Clin. Tumor Immunol., Daniel Hoed Cancer Cent., PO Box 5201, 3008 AE Rotterdam, Netherlands  
 SOURCE: International Journal of Cancer, (1997) Vol. 73, No. 2, pp. 211-219.  
 CODEN: IJCNAW. ISSN: 0020-7136.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 7 Nov 1997  
 Last Updated on STN: 7 Nov 1997

L94 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 ACCESSION NUMBER: 1996:383107 BIOSIS  
 DOCUMENT NUMBER: PREV199699105463  
 TITLE: Single chain Ig/gamma gene-redirceted **human** T lymphocytes produce cytokines, specifically lyse tumor cells, and recycle lytic capacity.  
 AUTHOR(S): Weijtgens, Mo E. M.; Willemsen, Ralph A.; Valerio, Dinko; Stam, Kees; **Bolhuis, Reinder I. H.** [Reprint author]  
 CORPORATE SOURCE: Dep. Clinical Tumor Immunology, Daniel den Hoed Cancer Cent., Groene Hilledijk 301, 3075 EA Rotterdam, Netherlands  
 SOURCE: Journal of Immunology, (1996) Vol. 157, No. 2, pp. 836-843.  
 CODEN: JOIMA3. ISSN: 0022-1767.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 26 Aug 1996  
 Last Updated on STN: 26 Aug 1996

L94 ANSWER 8 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 ACCESSION NUMBER: 1995:496419 BIOSIS  
 DOCUMENT NUMBER: PREV199598519969  
 TITLE: Regression of advanced ovarian carcinoma by intraperitoneal treatment with autologous T lymphocytes retargeted by a bispecific monoclonal **antibody**.  
 AUTHOR(S): Canevari, Silvana; Stoter, Gerrit; Arienti, Flavio; Bolis, Giorgio; Colnaghi, Maria I.; Di Re, Emanuela M.; Eggermont, Alexander M. M.; Goey, S. Hoo; Gratama, Jan W.; Lamers, Cor H. J.; Nooy, Marianne A.; Parmiani, Giorgio; Raspagliesi, Francesco; Ravagnani, Ferdinando; Scarfone, Giovanna; Trimbo, J. Baptist; Warnaar, Sven O.; **Bolhuis, Reiner L. H.**  
 CORPORATE SOURCE: Dep. Clinical Tumor Immunol., Rotterdam Cancer Inst., P.O. Box 5201, 3008 AE Rotterdam, Netherlands  
 SOURCE: Journal of the National Cancer Institute (Bethesda), (1995) Vol. 87, No. 19, pp. 1463-1469.  
 CODEN: JNCIEQ. ISSN: 0027-8874.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 29 Nov 1995  
 Last Updated on STN: 29 Nov 1995

L94 ANSWER 9 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:159962 BIOSIS  
 DOCUMENT NUMBER: PREV199598174262  
 TITLE: Inhibition of bispecific monoclonal **antibody** (bsAb)-targeted cytotoxicity by **human** anti-mouse **antibodies** in ovarian carcinoma patients treated with bsAb-targeted activated T-lymphocytes.  
 AUTHOR(S): Lamers, H. J.; Gratama, Jan W.; Warnaar, Sven O.; Stoter, Gerrit; **Bolhuis, Reinder L. H.** [Reprint author]  
 CORPORATE SOURCE: Dep. Med. Tumor Immunology, Daniel den Hoed Cancer Cent., P.O. Box 5201, 3008 AE Rotterdam, The Netherlands, netherlands  
 SOURCE: International Journal of Cancer, (1995) Vol. 60, No. 4, pp. 450-457.  
 CODEN: IJCNAW. ISSN: 0020-7136.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 11 Apr 1995  
 Last Updated on STN: 11 Apr 1995

L94 ANSWER 10 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1994:294335 BIOSIS  
 DOCUMENT NUMBER: PREV199497307335  
 TITLE: Targeted bispecific **antibody**-dependent cellular cytotoxicity against renal **cancer**.  
 AUTHOR(S): **Bolhuis, Reinder L. H.** [Reprint author]; Lamers, Cor [Reprint author]; Braakman, E. [Reprint author]; Stoter, Gerrit [Reprint author]; Fleuren, G. J.; Van Dijk, J.; Warnaar, S. O.  
 CORPORATE SOURCE: Rotterdam Cancer Inst., Daniel den Hoed Cancer Cent., Rotterdam, Netherlands  
 SOURCE: Klein, E. A. [Editor]; Bukowski, R. M. [Editor]; Finke, J. H. [Editor]. (1993) pp. 67-76. Renal cell carcinoma: Immunotherapy and cellular biology. Publisher: Marcel Dekker, Inc., 270 Madison Avenue, New York, New York 10016, USA; Marcel Dekker, Inc., Basel, Switzerland.  
 Meeting Info.: Second International Symposium. Cleveland, Ohio, USA. October 1991.  
 ISBN: 0-8247-9033-2.  
 DOCUMENT TYPE: Book  
 Conference; (Meeting)  
 Book; (Book Chapter)  
 Conference; (Meeting Paper)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 30 Jun 1994  
 Last Updated on STN: 30 Jun 1994

L94 ANSWER 11 OF 11 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1993:456728 BIOSIS  
 DOCUMENT NUMBER: PREV199396101628  
 TITLE: Analysis of production, purification, and cytolytic potential of bi-specific **antibodies** reactive with ovarian carcinoma-associated antigens and the T-cell antigen CD3.  
 AUTHOR(S): Van Ravenswaay Claassen, Hedda H. [Reprint author]; Van De Griend, Rene J.; Mezzanzanica, Delia; **Bolhuis, Reinder L. H.**; Warnaar, Sven O.; Fleuren, Gert Jan  
 CORPORATE SOURCE: Dep. Pathol., Univ. Leiden, PO Box 9603, 2300 RC Leiden,

Tungaturthi 10/635,908

SOURCE: The Netherlands, netherlands  
International Journal of Cancer, (1993) Vol. 55, No. 1, pp.  
128-136.  
CODEN: IJCNAW. ISSN: 0020-7136.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 5 Oct 1993  
Last Updated on STN: 5 Oct 1993.

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